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EVERYDAY NUMBER STORIES

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EVERYDAY NUMBER STORIES

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SUGGESTIONS TO TEACHERS

SUGGESTIONS FOR USING THE DIALOGUES AND THE PICTURES. Two children may be selected to impersonate Kate and Frank, and the dialogue may be read in the usual way. Have the remaining children follow the reading and decide if the answers are correctly given. Children enjoy this, and several different pairs of children may be selected to repeat the reading. In the second and subsequent readings, different numbers may be used so that the children will be kept on the alert. Or, the girls of the class may represent Kate and the boys Frank, giving the answer called for when all are ready. Another way is to disregard the dialogue form, and have the sentences or paragraphs read in turn, all paying strict attention in order to note if correct answers are supplied in the elliptical sentences. Supplement the lessons given by frequent use of measures suggested.

Have the pictures carefully studied. Many of them are suitable for oral language lessons. Indeed, the entire book, if wisely used, will be of great assistance in reading and language, as well as in arithmetic.

Page 9. Teach the following signs:

+ is read *and* or *plus*.
= is read *are*.
? is read *how many* or *what*.
– is read *less*.

Page 10. Teach that 1 nickel equals 5 c.

Page 14. Show by actual measurement that 2 pt. equal 1 qt. and 1 pt. equals $\frac{1}{2}$ qt. Teach the abbreviation pt. for pint or pints, and qt. for quart or quarts. Teach the symbol $\frac{1}{2}$.

Page 17. Teach that the sign × is read *times*.

Page 18. Show by measurement that 1 yard equals 3 feet, 1 foot equals $\frac{1}{3}$ yard, and 2 feet equal $\frac{2}{3}$ yard. Teach the abbreviation ft. for foot or feet, and yd. for yard or yards. Teach the symbols $\frac{1}{3}$ and $\frac{2}{3}$.

Page 23. Teach that the sign ÷ is read *divided by*.

Page 34. Show by measures that 1 bushel equals 4 pecks. Show parts of a bushel. Teach the abbreviation bu. for bushel or bushels, and pk. for peck or pecks. Teach the symbols $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$.

Page 40. Show by measures that 1 gallon equals 4 quarts. Show parts of a gallon. Teach the abbreviation gal. for gallon or gallons, and qt. for quart or quarts.

Page 43. Columns in addition should be added either up or down rapidly. Use similar pages for both oral and written work.

Page 44. Teach the abbreviation hr. for hour or hours, and da. for day or days.

Page 47. Teach the symbols $\frac{1}{8}$, $\frac{3}{8}$, etc., and the abbreviation c. for cents or cent.

Page 51. Teach the symbols $\frac{1}{7}$, $\frac{2}{7}$, etc. Teach the abbreviation wk. for week or weeks.

Page 52. Teach that the term *units* is the same as *ones*.

Page 57. Teach the abbreviation mo. for month or months.

Page 62. Teach that 12 things make 1 dozen.

Page 68. Show by measures that 1 peck equals 8 quarts. Teach the symbols $\frac{1}{8}$, $\frac{3}{8}$, etc.

Page 72. Show by measures that 1 gallon equals 8 pints.

Page 74. Show by use of scales that 1 pound equals 16 ounces. Teach the abbreviation lb. for pound or pounds, oz. for ounce or ounces.

Page 82. Illustrate by drawings on the board to show size of flower beds. Draw a square yard and divide it into square feet.

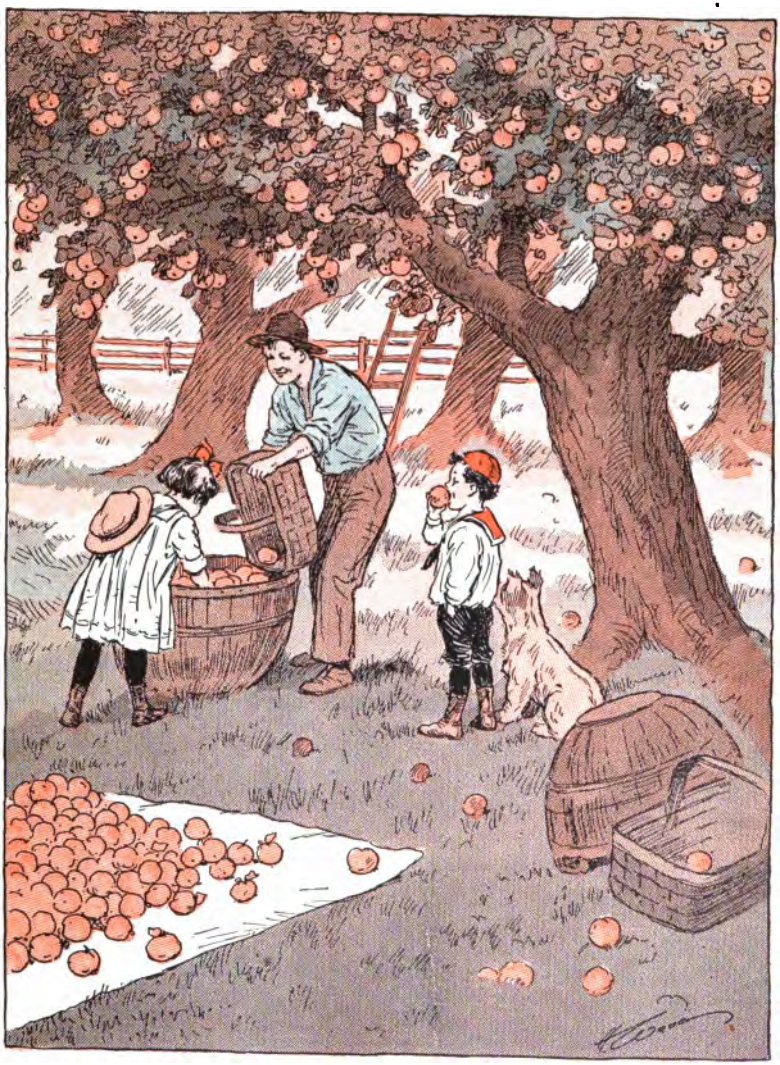
Page 83. Teach the abbreviation sq. ft. for square foot or square feet, and sq. yd. for square yard or square yards. Teach the symbols $\frac{1}{9}$, $\frac{2}{9}$, etc.

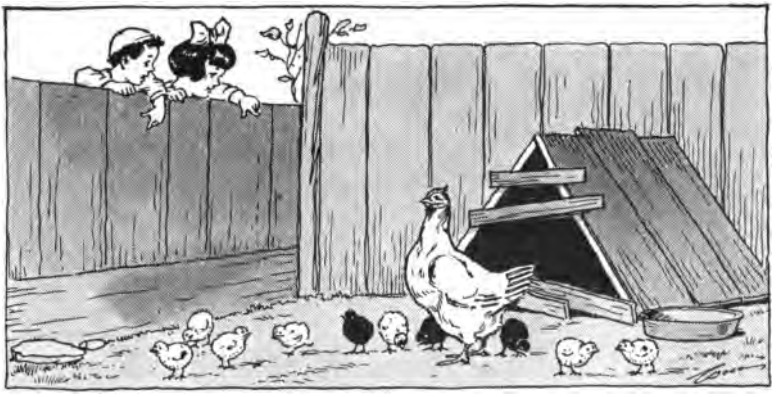
Page 99. Teach the symbol $\frac{1}{10}$.

Page 106. Show by measurement that 1 foot equals 12 inches. Teach the abbreviation in. for inch or inches. Teach the symbols $\frac{1}{12}$, $\frac{5}{12}$, etc.

Page 129. Teach the carrying process in addition.

Page 131. Teach the borrowing process in subtraction.





KATE. Speckle has some little chickens. Let us count them.

FRANK. I can not count them. They run about so fast.

KATE. You must count fast, then. One — two — three — four — five — six — seven — eight — nine — ten. She has ten little chicks.

FRANK. There are three black ones and all the others are white.

KATE. There are —— white ones.

FRANK. Four little chicks stay close to the mother. —— chicks run away from her.

5 chicks and 3 chicks are —— chicks. 5 + 3 =

6 frogs and 2 frogs are —— frogs. 6 + 2 =

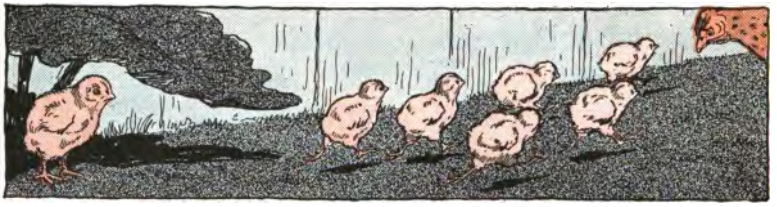
4 birds and 4 birds are —— birds. 4 + 4 =

7 bears and 1 bear are —— bears. 7 + 1 =

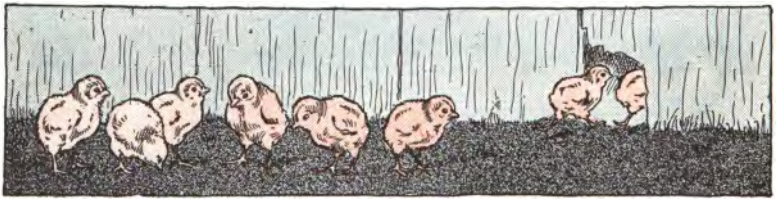
5 dolls and 2 dolls are —— dolls. 5 + 2 =

Here are some number stories:

Four chicks were under a big leaf. It began to rain. Three more chicks ran under the leaf. How many chicks were under the leaf then? $4 + 3 =$



The sun came out again. Speckle called the chicks: "Cluck, cluck!" Six chicks ran to her. How many chicks stayed under the big leaf? $7 - 6 =$



Eight chicks were in the yard. Two chicks saw a hole in the fence and went through it. How many chicks were left in the yard? $8 - 2 =$

5 chicks + 5 chicks = ? chicks.

4 chicks + ? chicks = 10 chicks.

3 chicks + ? chicks = 10 chicks.

10 chicks − 4 chicks = ? chicks.

8 chicks − 5 chicks = ? chicks.

Here is a number story that Kate made for Frank about 10 − 2:

Speckle had 10 little chicks. 2 ran away. How many little chicks stayed close to their mother?

Here is a number story that Frank made for Kate about 5 + 5:

5 little chicks are drinking water and 5 little chicks are eating meal. How many little chicks are there in all?

Here is a number story about 6 + 4:

Speckle has 6 black chicks and 4 white chicks. How many chicks has she?

FRANK. How much money have you, Kate?

KATE. I have one nickel and six cents. That makes —— cents. How much have you?

FRANK. I have one nickel and four cents. That makes —— cents.

KATE. I have —— cents more than you have. I will give you one cent. Then you will have —— cents and I will have —— cents.

FRANK. I am going to spend three cents for an orange. Ten cents less three cents are —— cents.

KATE. I will spend five cents for candy. Ten cents less five cents are —— cents.

NUMBERS THROUGH 11

Make number stories about:

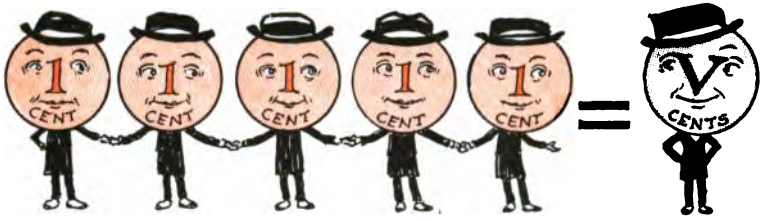
6 cents + 5 cents	11 cents – 2 cents
4 apples + 5 apples	11 oranges – 4 oranges
8 bananas + 3 bananas	11 plums – 6 plums
6 dolls + 4 dolls	11 tops – 8 tops

Read and give answers:

10 – 5 =	11 – 3 =
10 – 4 =	11 – 5 =
10 – 3 =	11 – 7 =
10 – 7 =	11 – 9 =
10 – 8 =	11 – 8 =
10 – 6 =	11 – 4 =
10 – 2 =	11 – 6 =
10 – 9 =	11 – 2 =

Add:

6	7	9	8	6	7	4
5	3	2	2	4	4	3
5	5	3	3	4	4	3
4	6	7	8	7	6	6



1 nickel + 2 cents are —— cents.
2 nickels + 2 cents are —— cents.
1 nickel + 3 cents are —— cents.
1 nickel + 6 cents are —— cents.
1 nickel + 7 cents are —— cents.
1 nickel + 4 cents are —— cents.
2 nickels − 4 cents are —— cents.
2 nickels − 8 cents are —— cents.
12 cents − 1 nickel are —— cents.
12 cents − 2 nickels are —— cents.

Number Stories

Frank had 12 cents. He spent 2 cents for a top and 3 cents for a little flag. He had —— cents left.

Kate had 11 cents. She spent 5 cents for a doll's hat and 2 cents for candy. She had —— cents left.

NUMBERS THROUGH 12

6 + 5 =	4 + 5 =	7 + 4 =
6 + 4 =	4 + 7 =	7 + 3 =
6 + 2 =	4 + 8 =	7 + 5 =
6 + 3 =	4 + 6 =	9 + 3 =
6 + 6 =	4 + 4 =	9 + 2 =
5 + 4 =	4 + 3 =	8 + 3 =
5 + 5 =	3 + 7 =	8 + 2 =
5 + 7 =	3 + 8 =	8 + 4 =
5 + 6 =	3 + 6 =	10 + 1 =
5 + 3 =	3 + 9 =	10 + 2 =

12 − 4 =	12 − 5 =	11 − 4 =
12 − 6 =	12 − 7 =	11 − 6 =
12 − 10 =	12 − 9 =	11 − 5 =
12 − 2 =	12 − 11 =	11 − 9 =
12 − 3 =	12 − 8 =	11 − 3 =

Subtract:

9	8	5	6	7	9	9
5	6	3	2	4	6	8
11	10	12	11	12	10	12
9	8	4	3	5	6	7

FRANK. See the measures that Uncle Will left here.

KATE. This measure holds one quart of water.

FRANK. This measure holds just one half as much. It holds one pint. In one quart there are —— pints.

KATE. I will put one quart of water into this pail. Now there are two pints in it.

FRANK. I will put one half quart into it. Now there are —— pints of water in the pail. That makes a whole quart and half a quart.

KATE. Now there are —— quarts of water in the pail.

FRANK. Let us fill the pail half full.

KATE. There are now six pints of water in it and it is half full.

FRANK. There are —— quarts in the pail.

KATE. If I put in six pints more there will be —— pints.

FRANK. There will be —— quarts of water in the pail when it is full.

12 pints less 6 pints are —— pints.
6 pints and 6 pints are —— pints.

$\frac{1}{2}$ of 12 pints is —— pints.
$\frac{1}{2}$ of 10 pints is —— pints.
$\frac{1}{2}$ of 8 pints is —— pints.
$\frac{1}{2}$ of 6 pints is —— pints.
$\frac{1}{2}$ of 4 pints is —— pints.

$\frac{1}{2}$ qt. = ? pt.	2 pt. = ? qt.
$1\frac{1}{2}$ qt. = ? pt.	4 pt. = ? qt.
3 qt. = ? pt.	7 pt. = ? qt.
$4\frac{1}{2}$ qt. = ? pt.	9 pt. = ? qt.
$5\frac{1}{2}$ qt. = ? pt.	10 pt. = ? qt.
6 qt. = ? pt.	6 pt. = ? qt.

Here are some number stories about Kate and Frank:

Kate bought a dozen oranges. She gave away $\frac{1}{2}$ of them. She had —— oranges left.

Frank had 8 pencils. He lost $\frac{1}{2}$ of them. He lost —— pencils.

Frank had a dime. He spent $\frac{1}{2}$ of it for candy. He had —— cents left.

There were 6 cups on the table. Kate took away $\frac{1}{2}$ of them. She took away —— cups.

Kate had a ribbon 4 yards long. She cut off $\frac{1}{2}$ of it. She cut off —— yards.

Frank had 12 marbles. He gave Kate $\frac{1}{2}$ of them. He kept —— marbles.

Frank and Kate picked $6\frac{1}{2}$ quarts of berries. They picked —— pints of berries.

Frank had 7 dollars and Kate had 6 dollars. Together they had —— dollars.

Kate drank a pint of milk each day. In 6 days she drank —— quarts of milk.

$6 + ? = 13$	$7 + ? = 13$	$13 - 7 =$
$5 + ? = 13$	$9 + ? = 13$	$13 - 9 =$
$4 + ? = 13$	$8 + ? = 13$	$13 - 3 =$

2 ones are ——
$2 \times 1 =$

3 ones are ——
$3 \times 1 =$

2 twos are ——
$2 \times 2 =$

3 twos are ——
$3 \times 2 =$

2 threes are ——
$2 \times 3 =$

3 threes are ——
$3 \times 3 =$

2 fours are ——
$2 \times 4 =$

3 fours are ——
$3 \times 4 =$

2 fives are ——
$2 \times 5 =$

4 ones are ——
$4 \times 1 =$

2 sixes are ——
$2 \times 6 =$

4 twos are ——
$4 \times 2 =$

KATE. I want to buy a new hair-ribbon. One yard will be enough, I think.

FRANK. Let me measure it with this foot measure. It is just three feet long. In a yard there are —— feet.

KATE. Then one foot is one third of a yard.

FRANK. Yes, and two thirds of a yard are —— feet.

KATE. In one yard there are —— thirds of a yard.

FRANK. If the ribbon were two yards long it would be —— feet long.

KATE. If the ribbon were two and one third yards long it would be —— feet long.

NUMBERS THROUGH 14

Draw a line 1 yard long.

Draw a line $\frac{1}{8}$ yard long.

Draw a line $\frac{2}{8}$ yard long.

Draw a line 2 yards long.

Draw a line $2\frac{2}{8}$ yards long.

$\frac{1}{8}$ yd. = ? ft.	2 ft. = ? yd.
$\frac{2}{8}$ yd. = ? ft.	1 ft. = ? yd.
1 yd. = ? ft.	12 ft. = ? yd.
2 yd. = ? ft.	6 ft. = ? yd.
3 yd. = ? ft.	3 ft. = ? yd.
4 yd. = ? ft.	9 ft. = ? yd.

Add:

4	5	4	7	6	4	5
4	3	5	6	6	5	5
6	3	7	1	1	3	4

2	3	5	2	4	3	4
4	3	3	5	3	3	3
3	2	2	2	2	1	4
2	2	2	2	2	3	2
2	3	2	2	3	4	1

FRANK. Look at my new kite. See what a long tail it has.

KATE. How long do you think the tail is?

FRANK. Let us measure it. Three feet and three feet and one foot are —— feet. It is —— feet long.

KATE. Let us measure it in yards. One yard and one yard and one third of a yard are —— yards. It is —— yards long.

FRANK. I don't think that is long enough. I am going to make it two feet longer. It is now —— feet long.

KATE. I think that nine feet is too long. Let us cut off one third of it.

FRANK. I will divide it into three equal parts. Three feet and three feet and three feet are nine feet.

KATE. One third of it will be —— feet. Now I have cut it off.

FRANK. Two thirds are left. The tail of my kite is —— feet long.

$\frac{1}{3}$ of 9 feet is —— feet.
$\frac{2}{3}$ of 9 feet are —— feet.
$\frac{1}{3}$ of 6 feet is —— feet.
$\frac{2}{3}$ of 6 feet are —— feet.
$\frac{1}{3}$ of 12 feet is —— feet.
$\frac{2}{3}$ of 12 feet are —— feet.

6 + ? = 13	10 + ? = 14	14 − 2 =
5 + ? = 13	8 + ? = 14	14 − 10 =
4 + ? = 13	6 + ? = 14	14 − 8 =
3 + ? = 13	3 + ? = 14	14 − 6 =
7 + ? = 13	7 + ? = 14	14 − 7 =
9 + ? = 13	9 + ? = 14	14 − 5 =
8 + ? = 13	5 + ? = 14	14 − 9 =

Make number stories about:

7 eggs + 7 eggs		$\frac{1}{2}$ of 14 cents
6 pints + 7 pints		10 feet − 4 feet
10 cents + 4 cents		8 pints − 4 pints

$\frac{1}{3}$ of 6 =	$\frac{1}{3}$ of 12 =	$\frac{1}{2}$ of 8 =
$\frac{2}{3}$ of 6 =	$\frac{2}{3}$ of 12 =	$\frac{1}{2}$ of 10 =
$\frac{1}{3}$ of 9 =	$\frac{1}{3}$ of 15 =	$\frac{1}{2}$ of 12 =
$\frac{2}{3}$ of 9 =	$\frac{2}{3}$ of 15 =	$\frac{1}{2}$ of 14 =

Count by 2's to 14.
Count by 3's to 15.
Count by 4's to 12.
Count by 5's to 15.

15 = 3 × ?	12 = 2 × ?	10 = 2 × ?
15 = 5 × ?	12 = 6 × ?	10 = 5 × ?
14 = 2 × ?	12 = 3 × ?	9 = 3 × ?
14 = 7 × ?	12 = 4 × ?	8 = 4 × ?

Multiply:

5	3	5	2	7	3	4
3	3	2	6	2	5	3

NUMBERS THROUGH 15

In 2 there are 2 ——
2 divided by 2 are ——

In 4 there are 2 ——
4 divided by 2 are ——

In 6 there are 2 ——
6 divided by 2 are ——

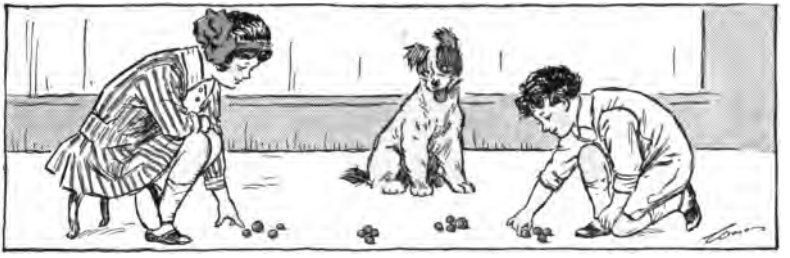
In 8 there are 2 ——
8 divided by 2 are ——

In 10 there are 2 ——
10 divided by 2 are ——

In 12 there are 2 ——
12 divided by 2 are ——

In 14 there are 2 ——
14 divided by 2 are ——

$2 \div 2 =$	$15 - 7 =$	$6 + 5 =$
$4 \div 2 =$	$15 - 6 =$	$7 + 8 =$
$6 \div 2 =$	$15 - 4 =$	$8 + 7 =$
$8 \div 2 =$	$15 - 3 =$	$7 + 7 =$
$10 \div 2 =$	$15 - 5 =$	$10 + 5 =$
$12 \div 2 =$	$15 - 10 =$	$9 + 4 =$



FRANK. Uncle Will gave me some new marbles.

KATE. How many did he give you?

FRANK. I don't know. Let us count them.

I have —— marbles.

KATE. Let us put two in a group. I can make —— groups. 8 times 2 marbles are —— marbles.

FRANK. Now I will put four in a group. I can make —— groups. 4 times 4 marbles are —— marbles.

KATE. Let us put eight in a group. I have made —— groups. 2 times 8 marbles are —— marbles.

In 16 there are —— eights.
In 16 there are —— fours.
In 16 there are —— twos.
In 15 there are —— threes.
In 15 there are —— fives.
In 14 there are —— sevens.
In 14 there are —— twos.
In 12 there are —— fours.
In 12 there are —— threes.

$16 \div 2 =$	$2 \times 6 =$
$16 \div 4 =$	$2 \times 7 =$
$16 \div 8 =$	$2 \times 8 =$
$15 \div 5 =$	$3 \times 4 =$
$15 \div 3 =$	$3 \times 5 =$
$14 \div 7 =$	$4 \times 4 =$
$14 \div 2 =$	$5 \times 3 =$
$12 \div 4 =$	$8 \times 2 =$

Add:

8	9	7	6	4	4	5
4	3	7	4	5	5	5
4	2	1	5	6	5	6

1 qt. = ? pt.	1 yd. = ? ft.
2 qt. = ? pt.	2 yd. = ? ft.
3 qt. = ? pt.	3 yd. = ? ft.
4 qt. = ? pt.	4 yd. = ? ft.
5 qt. = ? pt.	5 yd. = ? ft.
6 qt. = ? pt.	1 nickel = ? c.
7 qt. = ? pt.	2 nickels = ? c.
8 qt. = ? pt.	3 nickels = ? c.

Count by 2's to 16.
Count by 3's to 15.
Count by 4's to 16.
Count by 5's to 15.
Count by 2's from 1 to 15.
Count by 3's from 1 to 16.
Count by 4's from 1 to 13.

Count backward by 2's from 16.
Count backward by 2's from 15.
Count backward by 3's from 15.
Count backward by 4's from 16.
Count backward by 4's from 15.
Count backward by 5's from 15.

Add:

5	8	3	9	5	5	6
7	4	7	2	6	8	6
5	6	5	6	7	6	7
9	7	5	8	7	9	8
8	7	8	7	8	7	7
2	4	3	5	5	6	9
3	4	5	6	8	9	7
3	5	5	3	4	2	3
6	2	4	2	4	2	5

Subtract:

16	16	16	15	12	11	14
8	7	10	4	6	4	5
16	16	10	12	13	13	14
9	6	4	7	6	8	7
15	14	13	15	15	14	13
8	8	7	9	7	6	9

KATE. Let us play school. I will be the teacher.

FRANK. All right. Give me some hard questions.

KATE. Here is a hard one. 14 pints are how many quarts?

FRANK. 14 pints are —— quarts.

KATE. 17 pints are how many quarts?

FRANK. That is too hard. I do not know.

KATE. I do not think that is hard. 16 pints are how many quarts?

FRANK. 16 pints are —— quarts.

KATE. Now, 17 pints are how many quarts?

FRANK. 17 pints are —— quarts. It is easy now.

KATE. 2 yards are how many feet?

FRANK. 2 yards are —— feet.

KATE. 5 yards are how many feet?

FRANK. 5 yards are —— feet.

KATE. 16 feet are how many yards?

FRANK. 16 feet are —— yards.

KATE. 17 feet are how many yards?

FRANK. 17 feet are —— yards.

KATE. You are a good pupil. Now let us go outdoors and play.

17 – 3 =	17 – 7 =	16 – 7 =
17 – 10 =	17 – 6 =	16 – 5 =
17 – 8 =	17 – 9 =	16 – 8 =
17 – 5 =	16 – 9 =	16 – 10 =

Make number stories about:

17 birds – 10 birds	17 frogs – 9 frogs
16 roses – 4 roses	16 marbles – 8 marbles
6 sheep + 8 sheep	9 chicks + 8 chicks
12 rabbits + 4 rabbits	10 plums + 5 plums

2 qt. = ? pt.	1 yd. = ? ft.
8 qt. = ? pt.	5 yd. = ? ft.
6 qt. = ? pt.	4 yd. = ? ft.
5 qt. = ? pt.	2 yd. = ? ft.
3 qt. = ? pt.	3 yd. = ? ft.
9 qt. = ? pt.	6 yd. = ? ft.

5 qt. + 5 pt. = ? pt.
4 qt. + 4 qt. = ? pt.
5 qt. + 5 qt. = ? pt.
6 qt. + 3 pt. = ? pt.
8 qt. − 3 pt. = ? pt.
18 pt. − 2 qt. = ? pt.

In 18 there are —— twos.
In 18 there are —— nines.
In 18 there are —— threes.
In 18 there are —— sixes.

18 ÷ 2 =	18 − 9 =	2 × 8 =
18 ÷ 3 =	18 − 4 =	2 × 9 =
18 ÷ 6 =	18 − 6 =	3 × 5 =
18 ÷ 9 =	18 − 12 =	3 × 6 =

Add:

9	6	8	9	8	8	8
7	8	7	6	3	8	9
4	5	9	6	8	4	6
4	6	3	6	2	5	6
3	2	3	4	5	6	6
8	7	6	9	8	9	8
8	4	5	4	5	4	6
1	3	4	4	2	2	4
4	3	5	7	6	7	7
4	6	5	7	4	7	8
5	2	6	2	6	2	3
4	5	6	6	5	5	4
3	2	3	6	5	3	5
4	4	4	3	5	5	4
2	1	3	3	2	3	2
10	14	14	11	13	15	10
7	4	3	5	2	2	6

FRANK. I have a yard measure and a foot rule. We can have fun measuring things.

KATE. Let us measure the rug first. This rug is 5 feet long and 3 feet wide. It is —— feet around it.

FRANK. This table is 4 feet long and 3 feet wide. It is —— feet around it.

KATE. This window is 6 feet high and 3 feet wide. It is —— feet around it.

FRANK. This big mirror is 3 feet high and 2 feet wide. It is —— feet around it.

KATE. This picture is 2 feet wide and 4 feet long. It is —— feet around it.

FRANK. This curtain is 7 feet long and 2 feet wide. It is —— feet around it.

NUMBERS THROUGH 19

19 − 6 =	8 + 8 =	7 + ? = 19
19 − 12 =	8 + 7 =	6 + ? = 19
19 − 4 =	9 + 8 =	4 + ? = 19
19 − 2 =	9 + 9 =	12 + ? = 19
19 − 8 =	10 + 9 =	16 + ? = 19
19 − 7 =	10 + 7 =	5 + ? = 19
19 − 11 =	8 + 9 =	14 + ? = 19
19 − 3 =	9 + 7 =	13 + ? = 19
19 − 5 =	6 + 9 =	11 + ? = 19
19 − 13 =	5 + 8 =	10 + ? = 19
19 − 9 =	12 + 7 =	9 + ? = 19

3 × 6 =	18 ÷ 6 =	6 + ? = 18
3 × 5 =	18 ÷ 2 =	12 + ? = 18
2 × 9 =	18 ÷ 3 =	10 + ? = 18
6 × 3 =	18 ÷ 9 =	5 + ? = 18
4 × 4 =	16 ÷ 4 =	15 + ? = 18
9 × 2 =	16 ÷ 2 =	3 + ? = 18
2 × 8 =	16 ÷ 8 =	13 + ? = 18
7 × 2 =	15 ÷ 3 =	9 + ? = 18
5 × 3 =	15 ÷ 5 =	8 + ? = 18
8 × 2 =	14 ÷ 7 =	7 + ? = 18
2 × 7 =	14 ÷ 2 =	4 + ? = 18

FRANK. Jack Frost came last night and the ground is covered with nuts. Let us get all we can and sell them.

KATE. We can fill these peck measures and then put the nuts into the bushel basket. It will take four pecks to fill it.

FRANK. Now I have one peck of nuts. The bushel basket is one fourth full.

KATE. I will put my peck into the basket. It is now half full. In one half bushel there are —— fourths of a bushel.

FRANK. I have put in another peck of nuts. Now the basket is three fourths full. Three fourths of a bushel are —— pecks.

KATE. I have another peck; now the basket is full. In one bushel there are —— pecks. Let us put the nuts into a sack and fill the basket again.

FRANK. Here is another peck. One bushel and one peck are —— pecks.

KATE. Now I will put my peck in. One bushel and two pecks are —— bushels.

FRANK. We shall soon have the basket full again. Two bushels of nuts are —— pecks.

KATE. If we get three bushels of nuts that will be —— pecks.

FRANK. I hope we can get four bushels. That will be —— pecks of nuts.

Multiply:

7	3	2	8	5	3	2
2	4	4	2	3	6	10

1 bu. = ? pk.	3 bu. = ? pk.
$\frac{1}{2}$ bu. = ? pk.	$3\frac{1}{2}$ bu. = ? pk.
$\frac{1}{4}$ bu. = ? pk.	$3\frac{3}{4}$ bu. = ? pk.
$\frac{3}{4}$ bu. = ? pk.	4 bu. = ? pk.
$1\frac{1}{2}$ bu. = ? pk.	$4\frac{2}{4}$ bu. = ? pk.
$2\frac{1}{4}$ bu. = ? pk.	5 bu. = ? pk.

Make number stories about:

5 bushels of nuts $-2\frac{1}{2}$ bushels of nuts
5 yards of ribbon $+1\frac{1}{3}$ yards of ribbon
2 bushels of apples $-1\frac{1}{4}$ bushels of apples

In 18 there are —— nines.
In 18 there are —— sixes.
In 20 there are —— tens.
In 20 there are —— fours.
In 20 there are —— fives.
In 20 there are —— twos.

Multiply:

10	9	6	5	4	4	3
2	2	3	4	5	4	5

Number Stories

Kate bought a piece of ribbon $7\frac{1}{2}$ yards long. She cut off 2 yards. —— yards were left in the piece.

Kate's father bought a barrel of apples that held $2\frac{1}{2}$ bushels. He bought —— pecks of apples.

If a quart of milk costs 8 cents, $2\frac{1}{2}$ quarts will cost —— cents.

Kate paid $2\frac{1}{2}$ dollars for a pair of shoes and $3\frac{1}{2}$ dollars for a hat. She spent —— dollars.

Frank can walk 4 miles in an hour. In $2\frac{1}{2}$ hours he can walk —— miles.

Kate bought grapes at 8 cents a pound. For 20 cents she received —— pounds of grapes.

Frank bought 11 apples at 2 cents each. He paid —— cents.

Kate and Frank gathered 4 bushels of nuts. They sold $1\frac{1}{2}$ bushels. They had —— bushels left.

Frank can ride 8 miles in an hour on his wheel. How long will it take him to go 20 miles?

2 quarts are —— pints.
4 quarts are —— pints.
10 quarts are —— pints.
21 pints are —— quarts.
11 quarts are —— pints.
23 pints are —— quarts.
24 pints are —— quarts.

5 yards are —— feet.
16 feet are —— yards.
6 yards are —— feet.
20 feet are —— yards.
7 yards are —— feet.
22 feet are —— yards.
23 feet are —— yards.
24 feet are —— yards.

5 bushels are —— pecks.
20 pecks are —— bushels.
21 pecks are —— bushels.
22 pecks are —— bushels.
23 pecks are —— bushels.
24 pecks are —— bushels.

Tell number stories about:

6 qt. + 1 pt.	5 qt. − 3 pt.
5 yd. + 2 ft.	6 yd. − 4 ft.
3 pk. + 3 pk.	6 bu. − 3 pk.

24 = ? × 12	24 = ? × 2	20 = ? × 10
24 = ? × 8	22 = ? × 11	20 = ? × 5
24 = ? × 6	22 = ? × 2	20 = ? × 4
24 = ? × 4	21 = ? × 3	20 = ? × 2
24 = ? × 3	21 = ? × 7	18 = ? × 9

Count by 2's to 24.
Count by 3's to 24.
Count by 4's to 24.
Count by 5's to 24.
Count by 6's to 24.

$\frac{1}{2}$ of 24 =	$\frac{1}{3}$ of 9 =	$\frac{1}{4}$ of 8 =
$\frac{1}{2}$ of 20 =	$\frac{1}{3}$ of 12 =	$\frac{3}{4}$ of 8 =
$\frac{1}{2}$ of 18 =	$\frac{1}{3}$ of 15 =	$\frac{1}{4}$ of 12 =
$\frac{1}{2}$ of 16 =	$\frac{1}{3}$ of 21 =	$\frac{3}{4}$ of 12 =
$\frac{1}{2}$ of 14 =	$\frac{1}{3}$ of 24 =	$\frac{1}{4}$ of 16 =
$\frac{1}{2}$ of 10 =	$\frac{1}{3}$ of 18 =	$\frac{1}{4}$ of 20 =

FRANK. Uncle Will has been milking old Bess. Here he comes with the milk.

KATE. I wonder how much he got today. Let us see you measure the milk, please, Uncle Will.

UNCLE WILL. Yes, you may stand here by the table. This is a gallon measure. It takes four quarts of milk to fill it. The measure is half full now. Do you know how many quarts that is?

FRANK. I know! It is —— quarts.

KATE. If you put in —— quarts more it will be full.

UNCLE WILL. That is right. I will pour the gallon of milk into the jar and fill it again. Now the gallon measure is one fourth full. How many quarts is that?

KATE. That is just —— quart.

UNCLE WILL. Here is another quart. Now the gallon measure is two fourths full.

FRANK. That is —— quarts. Two fourths of a gallon is the same as —— of a gallon.

UNCLE WILL. I will put in another quart. Now the gallon measure is three fourths full.

KATE. There are —— quarts of milk in it. One quart more and it will be full.

UNCLE WILL. It is full now. I will pour it into the jar. There are —— quarts of milk in the jar now.

FRANK. Old Bess is a good cow. She gave —— gallons of milk.

1 gal. = ? qt.	2 qt. = ? gal.
$1\frac{1}{2}$ gal. = ? qt.	1 qt. = ? gal.
$1\frac{1}{4}$ gal. = ? qt.	3 qt. = ? gal.
$1\frac{3}{4}$ gal. = ? qt.	4 qt. = ? gal.
2 gal. = ? qt.	6 qt. = ? gal.
$2\frac{1}{2}$ gal. = ? qt.	5 qt. = ? gal.
3 gal. = ? qt.	7 qt. = ? gal.
4 gal. = ? qt.	8 qt. = ? gal.
5 gal. = ? qt.	12 qt. = ? gal.
6 gal. = ? qt.	20 qt. = ? gal.

2 gal. + 3 qt. = ? qt.
2 gal. + 5 qt. = ? qt.
3 gal. + 3 qt. = ? qt.
5 gal. + 2 qt. = ? qt.
4 gal. + 5 qt. = ? qt.
5 gal. − 2 qt. = ? qt.
6 gal. − 5 qt. = ? qt.
5 gal. − 3 qt. = ? qt.
4 gal. − 6 qt. = ? qt.
4 gal. − 10 qt. = ? qt.
3 gal. − 9 qt. = ? qt.

Add:

6	5	7	8	9	7	8
6	5	7	8	9	6	4
2	3	7	4	2	7	3

4	5	6	3	2	7	8
7	8	9	8	7	7	8
4	4	4	3	5	6	4
7	3	5	8	6	2	4

5	4	3	4	5	2	2
5	6	7	4	3	6	6
5	6	2	4	4	4	5
5	6	7	4	3	6	6
2	4	3	5	9	6	5

3	4	3	4	7	6	5
5	3	6	2	6	3	2
3	4	3	4	7	4	4
5	3	6	3	3	2	4
6	4	3	4	1	4	5

FRANK. It is seven o'clock. We can stay up one hour more. How many hours are there in a whole day?

KATE. In a day there are twenty-four hours. The minute hand of the clock has to go around —— times every day.

FRANK. From noon until midnight is —— hours. From midnight until noon is —— hours.

KATE. One half of a day is —— hours.

FRANK. I get up at seven o'clock. It is —— hours until noon. I go to bed at eight o'clock. That is —— hours after noon. I am awake —— hours each day.

KATE. Father works one third of each day. He works —— hours.

12 hours + 12 hours = ? hours.

$\frac{1}{2}$ day = ? hours.

8 hours + 8 hours + 8 hours = ? hours.

3 × 8 hours = ? hours.

$\frac{1}{3}$ day = ? hours.

$\frac{2}{3}$ day = ? hours.

6 hours + 6 hours + 6 hours + 6 hours = ? hours.

$\frac{1}{4}$ day = ? hours.

$\frac{2}{4}$ day = ? hours.

$\frac{3}{4}$ day = ? hours.

5 cents are $\frac{1}{4}$ of —— cents.

3 books are $\frac{1}{3}$ of —— books.

6 marbles are $\frac{1}{4}$ of —— marbles.

4 days are $\frac{1}{3}$ of —— days.

9 feet are $\frac{1}{2}$ of —— feet.

3 nickels are $\frac{1}{2}$ of —— nickels.

7 weeks are $\frac{1}{2}$ of —— weeks.

4 apples are $\frac{1}{4}$ of —— apples.

12 yards are $\frac{1}{2}$ of —— yards.

9 inches are $\frac{1}{3}$ of —— inches.

10 oranges are $\frac{1}{2}$ of —— oranges.

KATE. Father gave me a nickel.

FRANK. He gave me five copper cents. That is as much as a nickel. Here is one cent. One cent is one fifth of a nickel, because five cents make one nickel.

KATE. Show me two fifths of a nickel.

FRANK. Two fifths of a nickel are —— cents.

KATE. Please lend me three cents. One nickel and three cents are —— cents.

FRANK. Eight cents are —— nickels.

KATE. Father gave me five nickels for a new book. Five nickels are —— cents.

FRANK. My book will cost twenty cents. I shall ask father for —— nickels.

$\frac{1}{5}$ nickel = ? c.	2 c. = ? nickels.
$\frac{3}{5}$ nickel = ? c.	4 c. = ? nickels.
$\frac{4}{5}$ nickel = ? c.	3 c. = ? nickels.
1 nickel = ? c.	10 c. = ? nickels.
2 nickels = ? c.	20 c. = ? nickels.
3 nickels = ? c.	5 c. = ? nickels.
4 nickels = ? c.	15 c. = ? nickels.
5 nickels = ? c.	25 c. = ? nickels.

Tell number stories about:

4 nickels + 3 c.	19 c. – 3 nickels
2 nickels + 6 c.	18 c. – 2 nickels

23 – 5 =	24 – 4 =	25 – 5 =
23 – 4 =	24 – 14 =	25 – 15 =
23 – 15 =	24 – 20 =	25 – 12 =
23 – 10 =	24 – 8 =	25 – 10 =
23 – 12 =	24 – 6 =	25 – 11 =
23 – 13 =	24 – 10 =	25 – 6 =
23 – 6 =	24 – 12 =	25 – 9 =
23 – 7 =	24 – 13 =	25 – 8 =
23 – 9 =	24 – 11 =	25 – 20 =

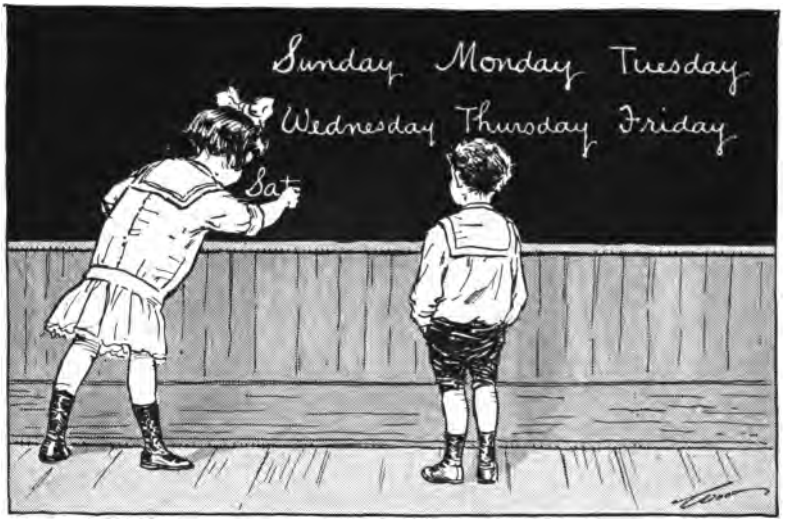
20 pints are —— quarts.
24 pints are —— quarts.
26 pints are —— quarts.
28 pints are —— quarts.
21 feet are —— yards.
24 feet are —— yards.
18 feet are —— yards.
15 feet are —— yards.
27 feet are —— yards.
12 feet are —— yards.
20 quarts are —— gallons.
24 quarts are —— gallons.
16 quarts are —— gallons.
28 quarts are —— gallons.

The multiplication table of twos:

$2 \times 1 = 2$	$2 \times 7 = 14$
$2 \times 2 = 4$	$2 \times 8 = 16$
$2 \times 3 = 6$	$2 \times 9 = 18$
$2 \times 4 = 8$	$2 \times 10 = 20$
$2 \times 5 = 10$	$2 \times 11 = 22$
$2 \times 6 = 12$	$2 \times 12 = 24$

Add:

19	16	15	18	12	21	14
4	6	8	10	8	6	8
8	6	4	8	9	8	7
8	7	5	2	3	4	9
4	8	6	4	6	9	2
9	8	6	5	4	9	8
9	7	8	5	9	9	9
3	5	4	7	3	9	8
7	6	8	9	5	8	9
7	7	4	3	4	5	7
4	2	5	6	6	9	6
3	6	5	6	8	6	7
9	8	5	5	8	4	6
5	4	5	4	2	6	7
2	3	4	6	9	4	6
2	4	2	2	1	5	2



FRANK. Can you say the names of the days of the week?

KATE. Yes, I can say them and I can spell them, too. I will write them and you can count them.

FRANK. There are seven days in the week. To-day is Friday. Only one seventh of the week is left.

KATE. We go to school five days.

FRANK. That is —— sevenths of the week.

KATE. Next week we have a holiday, so we shall go to school only —— sevenths of the week.

FRANK. How many days are there in two weeks?

KATE. There are —— days in two weeks.

FRANK. How many days are there in three weeks?

KATE. There are —— days in three weeks.

1 wk. = ? da.	1 da. = ? wk.
$\frac{1}{7}$ wk. = ? da.	3 da. = ? wk.
$\frac{3}{7}$ wk. = ? da.	6 da. = ? wk.
$\frac{5}{7}$ wk. = ? da.	8 da. = ? wk.
$\frac{6}{7}$ wk. = ? da.	10 da. = ? wk.
$1\frac{3}{7}$ wk. = ? da.	14 da. = ? wk.
$1\frac{4}{7}$ wk. = ? da.	15 da. = ? wk.
2 wk. = ? da.	21 da. = ? wk.
3 wk. = ? da.	22 da. = ? wk.

$26 = ? \times 13$	$28 - 5 =$	$28 - 18 =$
$26 = ? \times 2$	$28 - 9 =$	$28 - 10 =$
$27 = ? \times 3$	$28 - 14 =$	$28 - 20 =$
$27 = ? \times 9$	$28 - 7 =$	$28 - 6 =$
$28 = ? \times 7$	$28 - 21 =$	$28 - 16 =$

Begin with 2 and count by 2's to 30.
Begin with 3 and count by 2's to 29.
Begin with 3 and count by 3's to 30.
Begin with 2 and count by 3's to 29.
Begin with 4 and count by 4's to 28.

1 ten and 3 units are 13.
2 tens and 5 units are ——.
2 tens and —— units are 28.
2 tens and 6 units are ——.
2 tens and —— units are 29.

2 times —— are 30.
3 times —— are 30.
5 times —— are 30.
6 times —— are 30.
10 times —— are 30.

15 times —— are 30.
2 times —— are 28.
4 times —— are 28.
7 times —— are 28.
14 times —— are 28.

Add:

8	5	2	3	6	8	2
3	2	5	2	5	6	9
2	5	4	4	5	6	2
4	3	8	3	4	2	2
12	10	15	13	12	16	10
4	10	4	6	5	4	7
5	2	3	5	5	3	7
3	1	6	2	4	5	3
2	3	1	4	3	2	2
8	9	7	6	5	7	8
8	9	6	3	4	4	4
3	2	3	3	5	7	3
3	4	1	2	4	5	2
3	5	4	5	6	6	5
9	8	8	7	7	9	8
8	7	8	5	8	1	6
6	5	4	7	3	6	4
3	6	7	6	6	4	3
4	2	3	4	5	9	7

24 pt. = ? qt.	12 qt. = ? gal.
25 pt. = ? qt.	16 qt. = ? gal.
26 pt. = ? qt.	20 qt. = ? gal.
28 pt. = ? qt.	24 qt. = ? gal.
29 pt. = ? qt.	28 qt. = ? gal.
30 pt. = ? qt.	29 qt. = ? gal.

21 ft. = ? yd.	15 c. = ? nickels.
24 ft. = ? yd.	20 c. = ? nickels.
27 ft. = ? yd.	25 c. = ? nickels.
28 ft. = ? yd.	27 c. = ? nickels.
29 ft. = ? yd.	29 c. = ? nickels.
30 ft. = ? yd.	30 c. = ? nickels.

Tell number stories about:

5 gallons of vinegar – 2 quarts of vinegar

$9\frac{1}{3}$ yards of lace – 2 yards of lace

15 quarts of milk – 5 pints of milk

5 nickels – 17 cents

4 weeks + 2 days

$\frac{1}{4}$ of 20 cents

$\frac{1}{2}$ of 30 feet

25 − 10 =	28 − 14 =	10 + 9 =
25 − 5 =	28 − 8 =	11 + 11 =
25 − 15 =	28 − 18 =	12 + 10 =
25 − 6 =	28 − 10 =	14 + 10 =
25 − 8 =	28 − 4 =	16 + 12 =
25 − 7 =	28 − 24 =	18 + 10 =
25 − 9 =	28 − 5 =	20 + 10 =
26 − 13 =	29 − 9 =	10 + 15 =
26 − 6 =	29 − 19 =	12 + 11 =
26 − 16 =	29 − 8 =	13 + 9 =
26 − 5 =	29 − 6 =	15 + 10 =
26 − 4 =	29 − 16 =	17 + 6 =
26 − 7 =	29 − 4 =	18 + 9 =
26 − 8 =	29 − 15 =	16 + 8 =
27 − 10 =	30 − 15 =	15 + 11 =
27 − 7 =	30 − 10 =	20 + 8 =
27 − 17 =	30 − 5 =	20 + 9 =
27 − 6 =	30 − 6 =	12 + 12 =
27 − 8 =	30 − 16 =	12 + 13 =
27 − 9 =	30 − 8 =	14 + 14 =
27 − 12 =	30 − 12 =	15 + 15 =

KATE. This is the fifteenth day of November. This month is not so long as October.

FRANK. November has —— days. I can find 15 on the calendar.

KATE. There are —— days more in the month.

FRANK. The month is just half gone.

KATE. We can divide November into three equal parts. —— days and —— days and —— days are 30 days.

FRANK. Then one third of a month is —— days, and two thirds are —— days.

KATE. The month will soon be two thirds gone.

15 da. + 15 da. = ? da.

2 × 15 da. = ? da.

$\frac{1}{2}$ mo. = ? da.

10 da. + 10 da. + 10 da. = ? da.

3 × 10 da. = ? da.

$\frac{1}{3}$ mo. = ? da.

$\frac{2}{3}$ mo. = ? da.

6 da. + 6 da. + 6 da. + 6 da. + 6 da. = ? da.

5 × 6 da. = ? da.

$\frac{1}{6}$ mo. = ? da.

$\frac{2}{6}$ mo. = ? da.

5 da. + 5 da. + 5 da. + 5 da. + 5 da. + 5 da. = ? da.

6 × 5 da. = ? da.

$\frac{1}{6}$ mo. = ? da.

3 × 10 days = ? da.

27 ÷ 3 =	30 ÷ 3 =	9 × 3 =
27 ÷ 9 =	30 ÷ 5 =	7 × 4 =
30 ÷ 2 =	30 ÷ 6 =	5 × 6 =
28 ÷ 4 =	30 ÷ 10 =	2 × 15 =
28 ÷ 7 =	30 ÷ 15 =	3 × 10 =

15 days are $\frac{1}{2}$ of —— days.
10 pints are $\frac{1}{5}$ of —— pints.
10 feet are $\frac{1}{2}$ of —— feet.
10 quarts are $\frac{1}{5}$ of —— quarts.
16 cents are $\frac{1}{2}$ of —— cents.

15 oranges are $\frac{1}{3}$ of —— oranges.
7 oranges are $\frac{1}{4}$ of —— oranges.
3 dolls are $\frac{1}{4}$ of —— dolls.
5 balls are $\frac{1}{4}$ of —— balls.
4 bananas are $\frac{1}{4}$ of —— bananas.

$\frac{1}{2}$ of 24 marbles are —— marbles.
$\frac{1}{8}$ of 24 marbles are —— marbles.
$\frac{1}{2}$ of 18 eggs are —— eggs.
$\frac{1}{5}$ of 15 apples are —— apples.
$\frac{2}{5}$ of 15 apples are —— apples.

$\frac{1}{2}$ of 20 pencils are —— pencils.
$\frac{1}{9}$ of 27 days are —— days.
$\frac{2}{3}$ of 21 days are —— days.
$\frac{1}{8}$ of 30 inches are —— inches.
$\frac{1}{2}$ of 22 cents are —— cents.

Add:

8	7	5	9	6	8	8
8	8	6	9	7	8	5
8	2	4	4	6	4	7
8	5	2	6	5	4	2

6	5	6	9	4	7	7
5	3	6	8	7	6	7
6	7	6	3	4	4	3
5	2	3	8	5	2	3
4	4	8	2	6	5	5

8	8	6	9	6	5	7
6	8	4	3	5	4	3
8	3	3	2	4	5	6
6	3	5	4	7	4	4
4	6	2	1	2	6	9

Multiply:

9	8	6	10	7	5	6
3	4	5	3	4	5	4

3	5	7	4	3	4	5
6	4	3	6	9	8	6

28 pt. = ? qt.
30 pt. = ? qt.
32 pt. = ? qt.
33 pt. = ? qt.
34 pt. = ? qt.

24 pk. = ? bu.
28 pk. = ? bu.
30 pk. = ? bu.
32 pk. = ? bu.
34 pk. = ? bu.

27 ft. = ? yd.
30 ft. = ? yd.
31 ft. = ? yd.
33 ft. = ? yd.
34 ft. = ? yd.

20 c. = ? nickels.
25 c. = ? nickels.
30 c. = ? nickels.
32 c. = ? nickels.
34 c. = ? nickels.

24 qt. = ? gal.
28 qt. = ? gal.
32 qt. = ? gal.
33 qt. = ? gal.
34 qt. = ? gal.

21 da. = ? wk.
28 da. = ? wk.
30 da. = ? wk.
32 da. = ? wk.
34 da. = ? wk.

Make number stories about:

17 quarts of milk – 10 quarts of milk
20 dollars + 14 dollars
30 days – 10 days
15 yards of silk + 6 yards of silk

NUMBERS THROUGH 34

$17 + 17 =$	$34 - 6 =$	$\frac{1}{2}$ of $18 =$
$20 + 13 =$	$34 - 5 =$	$\frac{1}{8}$ of $18 =$
$28 + 5 =$	$34 - 10 =$	$\frac{1}{2}$ of $20 =$
$26 + 6 =$	$34 - 4 =$	$\frac{1}{4}$ of $20 =$
$22 + 9 =$	$34 - 3 =$	$\frac{1}{5}$ of $20 =$
$24 + 8 =$	$34 - 9 =$	$\frac{1}{3}$ of $21 =$
$27 + 7 =$	$33 - 10 =$	$\frac{1}{2}$ of $22 =$
$25 + 9 =$	$33 - 6 =$	$\frac{1}{4}$ of $24 =$
$24 + 10 =$	$33 - 2 =$	$\frac{1}{8}$ of $24 =$
$29 + 5 =$	$33 - 7 =$	$\frac{1}{2}$ of $24 =$
$26 + 4 =$	$33 - 3 =$	$\frac{1}{2}$ of $30 =$
$34 \div 2 =$	$5 \times ? = 25$	$\frac{1}{5}$ of $25 =$
$33 \div 3 =$	$5 \times ? = 30$	$\frac{1}{2}$ of $26 =$
$33 \div 11 =$	$13 \times ? = 26$	$\frac{1}{8}$ of $27 =$
$32 \div 8 =$	$2 \times ? = 26$	$\frac{1}{4}$ of $28 =$
$32 \div 4 =$	$9 \times ? = 27$	$\frac{1}{2}$ of $28 =$
$32 \div 16 =$	$3 \times ? = 27$	$\frac{1}{4}$ of $32 =$
$32 \div 2 =$	$7 \times ? = 28$	$\frac{1}{5}$ of $30 =$
$30 \div 15 =$	$14 \times ? = 28$	$\frac{1}{3}$ of $30 =$
$30 \div 10 =$	$4 \times ? = 28$	$\frac{1}{2}$ of $32 =$
$30 \div 3 =$	$2 \times ? = 28$	$\frac{1}{2}$ of $34 =$

KATE. We always have a good time when we come out to the farm.

FRANK. Aunt Alice said we might gather the eggs. Let us do that first. We can take this basket.

KATE. Let us look first in the barn. See! There is a hen on her nest. Do not frighten her.

FRANK. Here are six eggs in this nest. That is —— dozen eggs.

KATE. Here are six more. That makes —— dozen.

FRANK. Now I have four more. That makes —— eggs.

KATE. It will take —— more eggs to make two dozen.

3 dozen eggs – 10 eggs are —— eggs.

2 dozen eggs – $\frac{1}{2}$ dozen eggs are —— eggs.

$\frac{1}{2}$ dozen eggs are —— eggs.

$\frac{1}{3}$ dozen eggs are —— eggs.

$\frac{2}{3}$ dozen eggs are —— eggs.

$\frac{1}{4}$ dozen eggs are —— eggs.

$1\frac{1}{2}$ dozen eggs are —— eggs.

1 dozen eggs and 8 eggs are —— eggs.

2 dozen eggs and 4 eggs are —— eggs.

$2\frac{1}{2}$ dozen eggs are —— eggs.

3 dozen eggs are —— eggs.

Make number stories about:

1 dozen eggs + 6 eggs

2 dozen eggs – 6 eggs

Write the multiplication table of twos.

The multiplication table of threes:

$3 \times 1 = 3$	$3 \times 7 = 21$
$3 \times 2 = 6$	$3 \times 8 = 24$
$3 \times 3 = 9$	$3 \times 9 = 27$
$3 \times 4 = 12$	$3 \times 10 = 30$
$3 \times 5 = 15$	$3 \times 11 = 33$
$3 \times 6 = 18$	$3 \times 12 = 36$

NUMBERS THROUGH 36

1 = $\frac{1}{2}$ of ——	1 = $\frac{1}{3}$ of ——
2 = $\frac{1}{2}$ of ——	2 = $\frac{1}{3}$ of ——
3 = $\frac{1}{2}$ of ——	3 = $\frac{1}{3}$ of ——
4 = $\frac{1}{2}$ of ——	4 = $\frac{1}{3}$ of ——
5 = $\frac{1}{2}$ of ——	5 = $\frac{1}{3}$ of ——
6 = $\frac{1}{2}$ of ——	6 = $\frac{1}{3}$ of ——
7 = $\frac{1}{2}$ of ——	7 = $\frac{1}{3}$ of ——
8 = $\frac{1}{2}$ of ——	8 = $\frac{1}{3}$ of ——
9 = $\frac{1}{2}$ of ——	9 = $\frac{1}{3}$ of ——
10 = $\frac{1}{2}$ of ——	10 = $\frac{1}{3}$ of ——
11 = $\frac{1}{2}$ of ——	11 = $\frac{1}{3}$ of ——
12 = $\frac{1}{2}$ of ——	12 = $\frac{1}{3}$ of ——

Subtract:

21	22	27	37	35	24	31
10	10	10	10	10	10	10
28	29	29	20	30	30	30
6	7	9	8	6	9	7
28	26	36	35	29	36	27
7	5	6	5	8	4	7

2 times —— are 34.	9 times —— are 36.
7 times —— are 35.	6 times —— are 36.
5 times —— are 35.	4 times —— are 36.
18 times —— are 36.	3 times —— are 36.
12 times —— are 36.	2 times —— are 36.

18 + 18 =	30 + ? = 36	36 − 10 =
20 + 15 =	26 + ? = 36	36 − 12 =
30 + 5 =	18 + ? = 36	36 − 6 =
28 + 4 =	20 + ? = 36	36 − 16 =
30 + 6 =	29 + ? = 36	36 − 26 =
29 + 5 =	31 + ? = 36	36 − 4 =
28 + 8 =	28 + ? = 36	36 − 14 =
27 + 5 =	16 + ? = 36	36 − 24 =
24 + 6 =	27 + ? = 36	36 − 5 =
21 + 12 =	25 + ? = 36	36 − 15 =

30 ÷ ? = 2	32 ÷ ? = 16	36 ÷ ? = 18
30 ÷ ? = 3	32 ÷ ? = 4	36 ÷ ? = 9
30 ÷ ? = 6	32 ÷ ? = 8	36 ÷ ? = 4
30 ÷ ? = 5	33 ÷ ? = 3	36 ÷ ? = 6
30 ÷ ? = 10	33 ÷ ? = 11	36 ÷ ? = 12

Number Stories

If a gallon of gasoline costs 12 cents, what will $2\frac{1}{2}$ gallons cost?

Kate's mother bought 15 yards of silk for a dress. This was $1\frac{1}{8}$ yards too much. How much did it take for the dress?

Kate's mother canned $2\frac{1}{2}$ gallons of cherries. How many quarts did she can?

Frank rode 6 miles on his bicycle in an hour. How far could he ride in $1\frac{1}{2}$ hours?

A grocer bought some oranges. He found that there were 3 spoiled ones in every dozen. How many spoiled ones were there in 12 dozen?

If it takes a freight train an hour to go 28 miles, how many miles can it go in $\frac{1}{4}$ of an hour?

If oranges cost 2 cents apiece,

$\frac{1}{2}$ dozen will cost —— cents.

$\frac{1}{8}$ dozen will cost —— cents.

$\frac{1}{4}$ dozen will cost —— cents.

1 dozen will cost —— cents.

If eggs cost $1\frac{1}{2}$ cents apiece,

2 eggs will cost —— cents.

4 eggs will cost —— cents.

3 eggs will cost —— cents.

6 eggs will cost —— cents.

30 pt. = ? qt.	37 qt. = ? gal.
32 pt. = ? qt.	38 qt. = ? gal.
34 pt. = ? qt.	30 c. = ? nickels.
36 pt. = ? qt.	35 c. = ? nickels.
38 pt. = ? qt.	36 c. = ? nickels.
36 ft. = ? yd.	28 da. = ? wk.
37 ft. = ? yd.	35 da. = ? wk.
38 ft. = ? yd.	36 da. = ? wk.

Add:

2	4	1	2	5	6	5
2	3	8	6	6	9	4
7	4	8	6	5	3	5
9	8	7	8	6	6	7
9	8	6	8	8	5	6
9	6	7	8	6	6	6

FRANK. Now let us feed the horses. There are eight in the barn.

KATE. Uncle Will said we might give them each one quart of oats.

FRANK. I will fill this peck measure and carry it for you. You can fill the quart measure from it.

KATE. There will be just enough to feed the eight horses. In one peck there are —— quarts.

FRANK. How hungry the horses are! How glad they are to see us!

KATE. You have taken half of the oats out of the peck measure. You have fed —— horses.

FRANK. If the horses eat a peck of oats every day, in two days they will eat —— quarts of oats.

KATE. In three days they will eat —— quarts of oats.

FRANK. In four days they will eat —— quarts of oats.

$\frac{1}{2}$ pk. = ? qt.	4 qt. = ? pk.
$\frac{1}{4}$ pk. = ? qt.	1 qt. = ? pk.
$\frac{3}{4}$ pk. = ? qt.	2 qt. = ? pk.
$\frac{1}{8}$ pk. = ? qt.	6 qt. = ? pk.
1 pk. = ? qt.	16 qt. = ? pk.
2 pk. = ? qt.	8 qt. = ? pk.
3 pk. = ? qt.	40 qt. = ? pk.
4 pk. = ? qt.	24 qt. = ? pk.
5 pk. = ? qt.	32 qt. = ? pk.

$\frac{1}{2}$ of 16 qt. = ? qt.	2×16 qt. = ? qt.
$\frac{1}{4}$ of 40 qt. = ? qt.	3×10 qt. = ? qt.
$\frac{1}{2}$ of 30 qt. = ? qt.	4×10 qt. = ? qt.

5 times —— are 30.	4 times —— are 36.
6 times —— are 30.	9 times —— are 36.
2 times —— are 32.	6 times —— are 36.
3 times —— are 33.	2 times —— are 38.
11 times —— are 33.	19 times —— are 38.
2 times —— are 34.	3 times —— are 39.
17 times —— are 34.	13 times —— are 39.
5 times —— are 35.	2 times —— are 40.
7 times —— are 35.	20 times —— are 40.
2 times —— are 36.	4 times —— are 40.
18 times —— are 36.	10 times —— are 40.
3 times —— are 36.	5 times —— are 40.
12 times —— are 36.	8 times —— are 40.

Write number stories about:

10 quarts of oats + 1 peck of oats

4 gallons of milk + 3 pints of milk

12 yards + 4 feet

6 nickels + 9 cents

$\frac{1}{2}$ of 4 weeks

$\frac{1}{3}$ of 21 days

40 pecks of corn − 2 bushels of corn

$20 + ? = 40$	$12 \times ? = 36$	$1 = \frac{1}{2}$ of ——
$30 + ? = 40$	$19 \times ? = 38$	$1 = \frac{1}{4}$ of ——
$32 + ? = 40$	$2 \times ? = 38$	$2 = \frac{1}{4}$ of ——
$35 + ? = 40$	$13 \times ? = 39$	$3 = \frac{1}{4}$ of ——
$31 + ? = 40$	$3 \times ? = 39$	$4 = \frac{1}{4}$ of ——
$33 + ? = 40$	$20 \times ? = 40$	$5 = \frac{1}{4}$ of ——
$36 + ? = 40$	$2 \times ? = 40$	$6 = \frac{1}{4}$ of ——
$29 + ? = 40$	$10 \times ? = 40$	$7 = \frac{1}{4}$ of ——
$19 + ? = 38$	$4 \times ? = 40$	$8 = \frac{1}{4}$ of ——
$20 + ? = 38$	$8 \times ? = 40$	$9 = \frac{1}{4}$ of ——
$30 + ? = 38$	$5 \times ? = 40$	$10 = \frac{1}{4}$ of ——

$32 \div 4 =$	$36 \div 18 =$	$1 = \frac{1}{5}$ of ——
$32 \div 8 =$	$38 \div 2 =$	$2 = \frac{1}{5}$ of ——
$34 \div 2 =$	$38 \div 19 =$	$3 = \frac{1}{5}$ of ——
$35 \div 5 =$	$39 \div 3 =$	$4 = \frac{1}{5}$ of ——
$35 \div 7 =$	$39 \div 13 =$	$5 = \frac{1}{5}$ of ——
$36 \div 2 =$	$40 \div 2 =$	$6 = \frac{1}{5}$ of ——
$36 \div 3 =$	$40 \div 4 =$	$7 = \frac{1}{5}$ of ——
$36 \div 4 =$	$40 \div 5 =$	$8 = \frac{1}{5}$ of ——
$36 \div 6 =$	$40 \div 8 =$	$1 = \frac{1}{6}$ of ——
$36 \div 9 =$	$40 \div 10 =$	$2 = \frac{1}{6}$ of ——
$36 \div 12 =$	$40 \div 20 =$	$3 = \frac{1}{6}$ of ——

KATE. Sometimes Uncle Will sells milk to people who live in town.

FRANK. He fills these pint bottles from the gallon measure.

KATE. One gallon measure full of milk will fill —— pint bottles.

FRANK. If the gallon measure were just half full it would fill —— pint bottles.

KATE. $\frac{1}{4}$ of a gallon would fill —— pint bottles.

FRANK. And $\frac{1}{8}$ of a gallon would fill —— pint bottle.

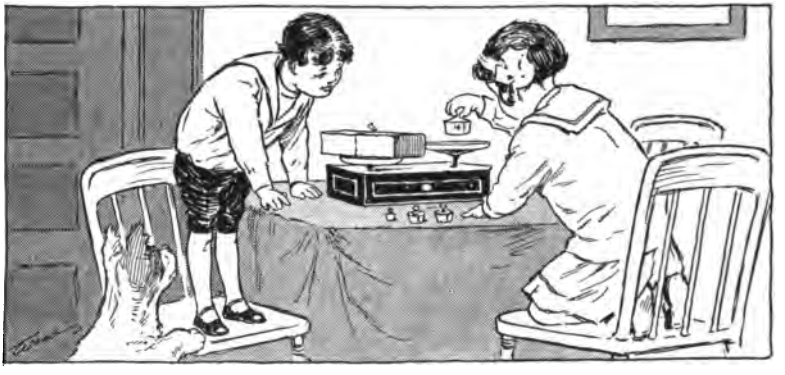
KATE. Uncle Will got 5 gallons of milk this morning. That will fill —— pint bottles.

1 gal. = ? pt.	$\frac{1}{2}$ gal. = ? pt.
2 gal. = ? pt.	$1\frac{1}{2}$ gal. = ? pt.
3 gal. = ? pt.	$2\frac{1}{2}$ gal. = ? pt.
4 gal. = ? pt.	$3\frac{1}{2}$ gal. = ? pt.
5 gal. = ? pt.	$4\frac{1}{2}$ gal. = ? pt.

2 gal. $-$ $\frac{1}{2}$ gal. = ? pt.
2 gal. $+$ $\frac{1}{4}$ gal. = ? pt.
3 gal. $-$ $\frac{1}{8}$ gal. = ? pt.
3 gal. $+$ $\frac{3}{8}$ gal. = ? pt.
4 gal. $+$ $\frac{1}{2}$ gal. = ? pt.
4 gal. $-$ $\frac{1}{4}$ gal. = ? pt.
5 gal. $-$ $\frac{1}{2}$ gal. = ? pt.
5 gal. $-$ $\frac{3}{8}$ gal. = ? pt.

Add:

6	5	7	8	3	6	8
4	5	3	2	4	4	8
3	2	8	7	7	7	4
5	1	2	3	7	3	4
2	3	5	5	3	8	7
4	6	4	9	4	2	3
5	4	2	2	5	9	1



FRANK. See what Uncle Will sent me for a birthday present — some real scales with weights!

KATE. Now we can weigh things. This weight is marked 16.

FRANK. That means one pound, because there are 16 ounces in one pound.

KATE. Let us weigh something that is just one pound. What can we find?

FRANK. Here is the box of candy that Aunt Alice sent me. I will put it on one side of the scales and the pound weight on the other side.

KATE. The scales balance. It weighs just one pound.

FRANK. This weight says 8. It means 8 ounces.

KATE. That must be one half pound.

FRANK. I know what we can do. We will weigh one half pound of candy and it will be your part of my birthday gift. Here it is.

KATE. Thank you, Frank.

FRANK. Now I will give half of my part to Mother. That will be —— ounces. That will be one fourth of a pound.

8 oz. + 8 oz. = ? oz.	$\frac{3}{4}$ lb. = ? oz.
2 × 8 oz. = ? oz.	8 × 2 oz. = ? lb.
8 oz. + 8 oz. = ? lb.	$\frac{3}{8}$ lb. = ? oz.
2 × 8 oz. = ? lb.	$\frac{4}{8}$ lb. = ? oz.
$\frac{1}{2}$ lb. = ? oz.	$\frac{7}{8}$ lb. = ? oz.
4 × 4 oz. = ? oz.	$\frac{5}{8}$ lb. = ? oz.
$\frac{1}{4}$ lb. = ? oz.	$1\frac{1}{8}$ lb. = ? oz.
$\frac{3}{4}$ lb. = ? oz.	$1\frac{1}{4}$ lb. = ? oz.
8 × 2 oz. = ? oz.	$1\frac{1}{2}$ lb. = ? oz.
$\frac{1}{8}$ lb. = ? oz.	$1\frac{3}{8}$ lb. = ? oz.

Count by 2's to 42.
Count by 3's to 42.
Count by 4's to 40.
Count by 5's to 40.
Count by 6's to 42.
Count by 7's to 42.
Count by 8's to 40.
Count by 14's to 42.

In 42 there are —— sevens.
In 42 there are —— sixes.
In 42 there are —— fourteens.
In 42 there are —— threes.
In 42 there are —— twenty-ones.
In 42 there are —— twos.

In 1 fortnight there are 14 days.
In 2 fortnights there are —— days.
In 3 fortnights there are —— days.

Write number stories about:

$\frac{1}{2}$ of 40 feet
$\frac{1}{4}$ of 40 cents
40 cents – 25 cents
2 pounds – 4 ounces

NUMBERS THROUGH 42

42 − 2 =	40 − 10 =	41 − 2 =
42 − 12 =	40 − 20 =	41 − 10 =
42 − 10 =	40 − 6 =	41 − 4 =
42 − 8 =	40 − 4 =	41 − 7 =
42 − 5 =	40 − 8 =	41 − 9 =
42 − 4 =	40 − 3 =	41 − 11 =
42 − 6 =	40 − 2 =	41 − 8 =
42 − 9 =	40 − 7 =	41 − 6 =
42 − 7 =	40 − 5 =	41 − 3 =
42 − 3 =	40 − 9 =	41 − 5 =

15 + 5 =	16 + 6 =	14 + 7 =
25 + 5 =	26 + 6 =	24 + 7 =
35 + 5 =	18 + 6 =	34 + 7 =
17 + 5 =	28 + 6 =	13 + 7 =
27 + 5 =	17 + 6 =	23 + 7 =
16 + 5 =	27 + 6 =	33 + 7 =
26 + 5 =	15 + 6 =	15 + 7 =
14 + 5 =	25 + 6 =	25 + 7 =
24 + 5 =	9 + 6 =	35 + 7 =
34 + 5 =	19 + 6 =	17 + 7 =
18 + 5 =	29 + 6 =	27 + 7 =
19 + 5 =	24 + 6 =	30 + 7 =

Number Stories

Kate is eight years old. Her mother is 4 times as old. How old is her mother?

Frank is 7 years old. His father is 5 times as old. How old is his father?

How long will it be until Frank is 21 years old?

How long will it be until Kate is 18?

Uncle Will is four times as old as Frank. How old is he?

How many years older than Frank is Uncle Will?

Kate's little cousin is just one fourth as old as she is. How old is the little cousin?

Add Kate's age, Frank's age, and Uncle Will's age.

Add Kate's age and her mother's age.

Add Frank's age and his father's age.

Add Kate's age and her father's age.

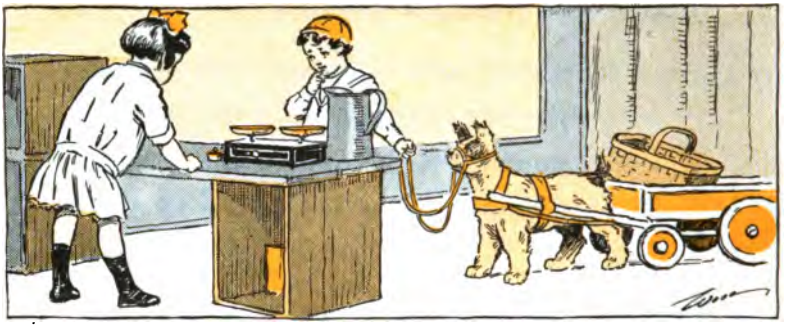
If nails cost 4 cents a pound,

—— pounds can be bought for 8 cents.
—— pounds can be bought for 16 cents.
—— pounds can be bought for 10 cents.
—— pounds can be bought for 17 cents.

If a pound of stick candy costs 16 cents,

—— pound can be bought for 8 cents.
—— pound can be bought for 4 cents.
—— pound can be bought for 12 cents.
—— pound can be bought for 2 cents.

15 + 15 =	$\frac{1}{2}$ of 30 =	44 − 4 =
20 + 20 =	$\frac{1}{2}$ of 36 =	44 − 14 =
22 + 22 =	$\frac{1}{2}$ of 32 =	44 − 24 =
12 + 12 =	$\frac{1}{2}$ of 28 =	44 − 34 =
14 + 14 =	$\frac{1}{2}$ of 40 =	44 − 10 =
16 + 16 =	$\frac{1}{2}$ of 44 =	44 − 20 =
11 + 11 =	$\frac{1}{2}$ of 24 =	44 − 30 =
18 + 18 =	$\frac{1}{2}$ of 26 =	44 − 40 =
10 + 10 =	$\frac{1}{2}$ of 20 =	44 − 7 =
13 + 13 =	$\frac{1}{2}$ of 42 =	44 − 9 =



KATE. Let us play store. I will be the storekeeper and weigh things on the new scales.

FRANK. I will come to buy.

KATE. All right. What can I sell you today?

FRANK. I want half a pound of butter. How much is it?

KATE. Butter is 40 cents a pound now. $\frac{1}{2}$ of a pound will cost —— cents.

FRANK. Then I want half a gallon of vinegar. How much is that?

KATE. Vinegar is 30 cents a gallon. Half a gallon will cost —— cents.

FRANK. I want 40 cents' worth of sugar.

KATE. Sugar is 8 cents a pound. I will give you —— pounds for 40 cents. Do you want some potatoes?

FRANK. Yes, how much are they?

KATE. They are 20 cents a peck.

FRANK. That is too much.

KATE. Well, I will let you have them for 15 cents a peck.

FRANK. You may send me half a bushel.

KATE. That will be —— cents.

If a pound of sugar costs 6 cents,

$3\frac{1}{2}$ pounds will cost —— cents.

4 pounds will cost —— cents.

If oranges cost 40 cents a dozen,

6 oranges will cost —— cents.

3 oranges will cost —— cents.

15 oranges will cost —— cents.

FRANK. How nice it is that spring has come. Now we can make our garden.

KATE. Yes, I shall make a pansy bed 1 foot long and 1 foot wide.

FRANK. Then it will be square and will contain 1 square foot. I shall make this bed 1 foot wide but 3 feet long. It will contain —— square feet.

KATE. Oh, no; make it 3 feet wide. Then it will be square and will contain —— square feet.

FRANK. Three feet are 1 yard. It will be 1 yard long and 1 yard wide and contain 1 square yard. In 1 square yard there are —— square feet.

KATE. Let us make another bed by the hedge. Make it 6 feet long and 3 feet wide. It will contain —— square feet.

FRANK. It will contain —— square yards.

KATE. If we could make a bed 9 feet long and 4 feet wide, it would contain —— square feet.

FRANK. That would be —— square yards.

KATE. Suppose we make one 8 feet long and 5 feet wide. It will contain —— square feet.

FRANK. Let us spade all the space on this side of the walk and then divide it into small beds.

KATE. I will measure the space. It is 9 feet long and 5 feet wide.

FRANK. Then we shall spade —— square feet.

KATE. That will be —— square yards.

$2 \times 20 =$	$3 \times 9 =$	$3 \times 11 =$
$2 \times 15 =$	$3 \times 8 =$	$3 \times 6 =$
$2 \times 12 =$	$3 \times 12 =$	$3 \times 5 =$
$2 \times 10 =$	$3 \times 10 =$	$3 \times 7 =$

Draw a square yard on the floor.

Divide it into square feet.

How many square feet in a square yard?

Draw an oblong 9 feet long and 3 feet wide.

Divide it into square feet.

How many square feet does it contain?

How many square yards?

1 sq. yd. = ? sq. ft.	$\frac{1}{9}$ of 9 sq. ft. = ? sq. ft.
2 sq. yd. = ? sq. ft.	$\frac{1}{9}$ sq. yd. = ? sq. ft.
3 sq. yd. = ? sq. ft.	$\frac{2}{9}$ of 9 sq. ft. = ? sq. ft.
4 sq. yd. = ? sq. ft.	$\frac{2}{9}$ sq. yd. = ? sq. ft.
5 sq. yd. = ? sq. ft.	$\frac{1}{9}$ of 9 sq. yd. = ? sq. ft.

3 tens and 3 units are ——— .

4 tens and ——— units are 42.

3 tens and 9 units are ——— .

2 tens and 8 units are ——— .

3 tens and ——— units are 37.

4 tens and ——— units are 45.

Add:

9	8	7	8	6	5	6
9	8	6	8	8	5	5
9	6	7	8	6	6	6
4	6	6	9	4	4	5
3	5	8	5	9	6	6
9	4	2	7	7	7	9

8	8	7	9	7	9	8
2	8	5	7	7	9	8
9	4	7	4	8	9	8
3	7	5	2	6	9	8
5	3	4	5	4	5	8
4	2	3	4	3	4	4

5	6	7	7	9	8	9
7	6	8	4	5	2	8
9	7	6	3	8	7	5
6	8	9	7	4	3	4
4	6	7	3	3	5	3
3	8	5	9	3	5	2
2	7	4	8	7	4	7
3	4	2	4	5	6	4

40 pt. = ? qt.
42 pt. = ? qt.
44 pt. = ? qt.
46 pt. = ? qt.
36 ft. = ? yd.
39 ft. = ? yd.
42 ft. = ? yd.

45 ft. = ? yd.
46 ft. = ? yd.
40 qt. = ? gal.
42 qt. = ? gal.
44 qt. = ? gal.
46 qt. = ? gal.
40 c. = ? nickels.

45 c. = ? nickels.
46 c. = ? nickels.
35 da. = ? wk.
42 da. = ? wk.
45 da. = ? wk.
46 da. = ? wk.
32 pt. = ? gal.

40 pt. = ? gal.
44 pt. = ? gal.
45 pt. = ? gal.
46 pt. = ? gal.
36 sq. ft. = ? sq. yd.
45 sq. ft. = ? sq. yd.
46 sq. ft. = ? sq. yd.

16 + 5 =	18 + 6 =	16 + 7 =
26 + 5 =	28 + 6 =	26 + 7 =
36 + 5 =	38 + 6 =	36 + 7 =
15 + 5 =	17 + 6 =	17 + 7 =
25 + 5 =	27 + 6 =	27 + 7 =
35 + 5 =	37 + 6 =	37 + 7 =
14 + 5 =	34 + 6 =	30 + 7 =

43 − 7 =	44 − 6 =	33 + ? = 43
43 − 9 =	44 − 8 =	36 + ? = 43
43 − 10 =	44 − 10 =	38 + ? = 43
43 − 20 =	44 − 20 =	30 + ? = 43
43 − 13 =	44 − 14 =	35 + ? = 43
43 − 8 =	44 − 9 =	37 + ? = 43
43 − 4 =	44 − 7 =	38 + ? = 44
43 − 6 =	44 − 5 =	37 + ? = 44
43 − 2 =	44 − 3 =	40 + ? = 44
43 − 3 =	44 − 2 =	36 + ? = 44
43 − 5 =	44 − 4 =	34 + ? = 44

45 − 10 =	46 − 10 =	35 + ? = 45
45 − 20 =	46 − 20 =	38 + ? = 45
45 − 15 =	46 − 16 =	34 + ? = 45
45 − 3 =	46 − 2 =	32 + ? = 45
45 − 5 =	46 − 4 =	36 + ? = 45
45 − 7 =	46 − 6 =	37 + ? = 45
45 − 9 =	46 − 8 =	38 + ? = 46
45 − 8 =	46 − 9 =	39 + ? = 46
45 − 6 =	46 − 7 =	40 + ? = 46
45 − 4 =	46 − 5 =	37 + ? = 46
45 − 2 =	46 − 3 =	35 + ? = 46

Number Stories

The rug in Kate's room is 10 feet long and 8 feet wide. How many feet is it around it?

The rug in the dining room is 12 feet long and 8 feet wide. How many feet is it around it?

Frank's brother works for $1\frac{1}{2}$ dollars a day. How much will he receive in 2 days? In 3 days?

Frank has a rope 45 feet long. He wishes to cut it into pieces each 9 feet long. Into how many pieces can he cut it?

When lemons are worth 30 cents a dozen, how many lemons can be bought for 45 cents?

A milkman had 4 gallons of milk. He sold $3\frac{1}{2}$ gallons. He had —— quarts left.

If a quart of vinegar can be bought for 5 cents, $\frac{1}{2}$ gallon will cost —— cents.

Kate had 7 yards of ribbon. She cut it into two equal parts. In each part there were —— yards.

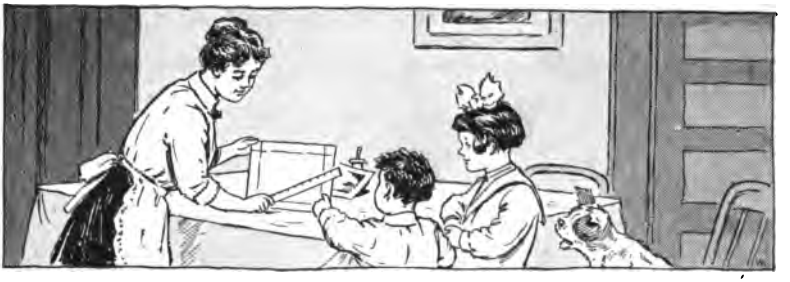
Frank paid 20 cents for $\frac{1}{2}$ dozen oranges. A dozen oranges would cost —— cents.

$10 + 10 + 10 =$	$\frac{1}{3}$ of $30 =$
$12 + 12 + 12 =$	$\frac{2}{3}$ of $30 =$
$15 + 15 + 15 =$	$\frac{1}{3}$ of $36 =$
$11 + 11 + 11 =$	$\frac{2}{3}$ of $36 =$
$9 + 9 + 9 =$	$\frac{1}{3}$ of $33 =$
$8 + 8 + 8 =$	$\frac{2}{3}$ of $33 =$
$13 + 13 + 13 =$	$\frac{1}{3}$ of $27 =$
$7 + 7 + 7 =$	$\frac{2}{3}$ of $27 =$

The multiplication table of fours:

$4 \times 1 = 4$	$4 \times 7 = 28$
$4 \times 2 = 8$	$4 \times 8 = 32$
$4 \times 3 = 12$	$4 \times 9 = 36$
$4 \times 4 = 16$	$4 \times 10 = 40$
$4 \times 5 = 20$	$4 \times 11 = 44$
$4 \times 6 = 24$	$4 \times 12 = 48$

$36 \div 3 =$	$36 \div 4 =$	$16 \div 4 =$
$30 \div 3 =$	$44 \div 4 =$	$12 \div 4 =$
$27 \div 3 =$	$48 \div 4 =$	$20 \div 4 =$
$33 \div 3 =$	$40 \div 4 =$	$28 \div 4 =$
$24 \div 3 =$	$24 \div 4 =$	$32 \div 4 =$



MOTHER. This picture is very pretty. Let me show you how to mount it.

KATE. I have a cardboard here that is 8 inches long and 6 inches wide.

MOTHER. That will be just right. I will measure 1 inch from the corner on the short side and draw a line parallel with the long side. I have made an oblong 6 inches long and 1 inch wide. It contains 6 square inches.

FRANK. You have made a big oblong, too. It is 6 inches long and 5 inches wide. It contains —— square inches.

MOTHER. I will draw a line 1 inch from the opposite side. These two narrow oblongs contain —— square inches.

KATE. You have left an oblong in the middle. It is 8 inches long and 4 inches wide. It contains —— square inches.

MOTHER. I will measure 1 inch from the corner on the long side and draw a line parallel with the short side. I have made 2 one inch squares and an oblong 4 inches long and 1 inch wide. The oblong contains —— square inches.

KATE. You still have left a large oblong. It is 7 inches long and 4 inches wide. It contains —— square inches.

MOTHER. I draw a line an inch from the other short side. I now have 4 one inch squares and 5 oblongs.

KATE. The oblong in the middle is 6 inches long and 4 inches wide. It contains —— square inches.

MOTHER. The 4 squares in the corners together contain —— square inches.

KATE. The 4 narrow oblongs together contain —— square inches.

FRANK. The 4 narrow oblongs and the 4 squares together contain —— square inches.

MOTHER. We will mount this picture on the middle oblong. It just covers it. It covers —— square inches of surface.

FRANK. It leaves a border of —— square inches.

KATE. The cardboard itself contains —— square inches.

Draw an oblong 4 inches long and 3 inches wide. How many square inches does it contain?

Divide it into 2 equal parts. How many square inches are there in each part?

Draw an oblong 5 inches long and 4 inches wide. How many square inches does it contain?

Divide it into two equal parts. How many square inches are there in each?

Divide each half into 2 equal parts. How many square inches are there in each of these parts? Each of these parts is what part of the oblong?

$\frac{1}{2}$ of —— is 20.	$\frac{1}{5}$ of —— is 5.
$\frac{1}{2}$ of —— is 24.	$\frac{1}{5}$ of —— is 8.
$\frac{1}{2}$ of —— is 22.	$\frac{1}{5}$ of —— is 6.
$\frac{1}{2}$ of —— is 18.	$\frac{1}{6}$ of —— is 5.
$\frac{1}{3}$ of —— is 12.	$\frac{1}{6}$ of —— is 6.
$\frac{1}{4}$ of —— is 9.	$\frac{1}{7}$ of —— is 5.
$\frac{1}{5}$ of —— is 7.	$\frac{1}{7}$ of —— is 6.
$\frac{1}{5}$ of —— is 4.	$\frac{1}{7}$ of —— is 4.

Make number stories about:

A flower bed 6 feet long and 3 feet wide

A rug 5 feet long and —— feet wide

A mirror 3 feet long and —— feet wide

Add:

9	8	9	9	8	6	7
4	8	6	6	7	6	6
7	6	7	5	3	6	7
3	4	5	4	6	6	6
9	3	2	8	4	6	7
2	5	4	2	9	6	6
5	5	9	8	5	5	7

In 48 there are two ——
In 48 there are three ——
In 48 there are four ——
In 48 there are six ——
In 48 there are eight ——
In 48 there are twelve ——
In 48 there are sixteen ——
In 48 there are twenty-four ——

In 45 there are three ——
In 45 there are five ——
In 45 there are nine ——
In 45 there are fifteen ——

In 44 there are two ——
In 44 there are four ——
In 44 there are eleven ——
In 44 there are twenty-two ——

In 42 there are two ——
In 42 there are three ——
In 42 there are six ——
In 42 there are seven ——

48 ÷ 2 =	44 ÷ 4 =	48 − 8 =
48 ÷ 3 =	44 ÷ 11 =	48 − 12 =
48 ÷ 4 =	44 ÷ 22 =	48 − 10 =
48 ÷ 6 =	42 ÷ 2 =	48 − 9 =
48 ÷ 8 =	42 ÷ 3 =	48 − 5 =
48 ÷ 12 =	42 ÷ 6 =	48 − 4 =
48 ÷ 16 =	42 ÷ 7 =	48 − 6 =
48 ÷ 24 =	42 ÷ 14 =	48 − 7 =
45 ÷ 3 =	42 ÷ 21 =	48 − 2 =
45 ÷ 5 =	40 ÷ 2 =	48 − 3 =
45 ÷ 9 =	40 ÷ 4 =	48 − 11 =
45 ÷ 15 =	40 ÷ 10 =	48 − 13 =
44 ÷ 2 =	40 ÷ 5 =	48 − 15 =

Write the multiplication table of twos.

Write the multiplication table of threes.

3 × 11 =	2 × 11 =	2 × 17 =
3 × 12 =	2 × 12 =	2 × 18 =
3 × 13 =	2 × 13 =	2 × 19 =
3 × 14 =	2 × 14 =	2 × 20 =
3 × 15 =	2 × 15 =	2 × 21 =
3 × 16 =	2 × 16 =	2 × 22 =

FRANK. Mother says that we may open our banks and count our money.

KATE. I think you have more than I have. I have a quarter and two nickels and three cents. I have —— cents.

FRANK. I have three dimes and two nickels and four cents. I have —— cents.

KATE. I should have forty cents if I had —— cents more.

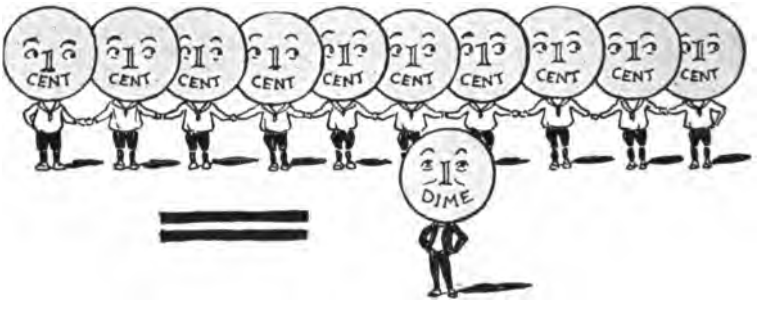
FRANK. I should have fifty cents if I had —— cents more.

KATE. I am going to take ten cents to buy a little bed for my doll. Ten cents taken from thirty-eight cents leaves —— cents.

FRANK. I want a new top. I can get a good one for ten cents. If I take ten cents from forty-four cents I shall have —— cents left.

4 nickels and 4 cents are —— cents.
6 nickels and 9 cents are —— cents.
2 dimes and 2 nickels are —— cents.
3 dimes and 6 cents are —— cents.
4 dimes and 9 cents are —— cents.
1 quarter and 1 nickel are —— cents.
1 quarter and 3 nickels are —— cents.
1 quarter and 2 dimes are —— cents.
1 quarter and 1 dime and 2 cents are —— cents.
3 dimes and 2 nickels and 1 cent are —— cents.
2 dimes and 3 nickels and 3 cents are —— cents.
4 dimes and 1 nickel and 4 cents are —— cents.

50 − 10 =	16 + 4 + 10 =
50 − 20 =	23 + 10 + 3 =
50 − 40 =	32 + 5 + 5 =
50 − 5 =	30 + 9 + 10 =
50 − 15 =	25 + 5 + 10 =
50 − 25 =	35 + 10 + 5 =



FRANK. I have put all of my money back into my bank except one dime.

KATE. I have put all of mine back except ten cents.

FRANK. One dime is the same as ten cents.

KATE. Let us put the cents into 2 equal groups.

FRANK. In each group there will be —— cents. $\frac{1}{2}$ of a dime is —— cents.

KATE. Now we will put them into 5 equal groups. In each group there will be —— cents.

FRANK. Then $\frac{1}{5}$ of a dime is —— cents and $\frac{2}{5}$ of a dime are —— cents.

KATE. Yes, and $\frac{3}{5}$ of a dime are —— cents, and $\frac{4}{5}$ of a dime are —— cents.

FRANK. If each cent is by itself, the dime will be divided into ten parts.

KATE. Then each part will be $\frac{1}{10}$ of a dime.

$\frac{1}{2}$ dime = ? c.	$1\frac{1}{2}$ dimes = ? c.
$\frac{1}{5}$ dime = ? c.	$2\frac{1}{5}$ dimes = ? c.
$\frac{2}{5}$ dime = ? c.	$2\frac{2}{5}$ dimes = ? c.
$\frac{3}{5}$ dime = ? c.	$3\frac{1}{10}$ dimes = ? c.
$\frac{1}{10}$ dime = ? c.	$3\frac{1}{2}$ dimes = ? c.
$\frac{7}{10}$ dime = ? c.	$4\frac{3}{5}$ dimes = ? c.

49 cents = ? dimes + ? cents.
49 cents = ? nickels + ? cents.
47 cents = ? quarters + ? cents.
47 cents = ? quarters + ? dimes + ? cents.
44 cents = ? dimes + ? cents.
44 cents = ? nickels + ? cents.
39 cents = ? dimes + ? cents.
39 cents = ? dimes + ? nickels + ? cents.
39 cents = ? quarters + ? dimes + ? cents.
38 cents = ? dimes + ? nickels + ? cents.
50 cents = ? quarters.
46 cents = ? dimes + ? cents.

Begin with 1 and count by 2's to 49.
Begin with 1 and count by 3's to 49.
Begin with 1 and count by 4's to 49.
Begin with 1 and count by 5's to 46.
Begin with 1 and count by 6's to 49.

Count backward by 2's from 50.
Count backward by 3's from 50.
Count backward by 4's from 50.
Count backward by 5's from 50.
Count backward by 6's from 50.

Draw a line $1\frac{1}{2}$ inches long.

Draw another line 4 times as long. How long is this line?

Draw a line $3\frac{1}{2}$ inches long. Draw another line 2 times as long. How long is it?

Draw a line 6 inches long. Draw a line $2\frac{1}{2}$ times as long. How long is it?

Draw a line 9 inches long. Draw a line $1\frac{1}{3}$ times as long. How long is it?

Draw a line 10 inches long. Draw a line $1\frac{1}{5}$ times as long. How long is it?

$2 \times 15 =$	$4 \times 6 =$	$9 \times 3 =$
$2 \times 25 =$	$4 \times 11 =$	$9 \times 5 =$
$2 \times 19 =$	$4 \times 12 =$	$9 \times 4 =$
$2 \times 16 =$	$4 \times 10 =$	$10 \times 2 =$
$2 \times 14 =$	$4 \times 8 =$	$10 \times 4 =$
$2 \times 13 =$	$4 \times 7 =$	$10 \times 5 =$
$2 \times 20 =$	$5 \times 6 =$	$10 \times 3 =$
$2 \times 12 =$	$5 \times 8 =$	$11 \times 3 =$
$2 \times 18 =$	$5 \times 10 =$	$11 \times 2 =$
$2 \times 17 =$	$5 \times 9 =$	$11 \times 4 =$
$2 \times 21 =$	$5 \times 7 =$	$12 \times 3 =$
$2 \times 23 =$	$6 \times 8 =$	$12 \times 2 =$
$3 \times 9 =$	$6 \times 6 =$	$12 \times 4 =$
$3 \times 10 =$	$6 \times 5 =$	$13 \times 3 =$
$3 \times 16 =$	$6 \times 7 =$	$13 \times 2 =$
$3 \times 14 =$	$7 \times 7 =$	$14 \times 2 =$
$3 \times 13 =$	$7 \times 5 =$	$14 \times 3 =$
$3 \times 15 =$	$7 \times 6 =$	$15 \times 3 =$
$3 \times 12 =$	$8 \times 4 =$	$15 \times 2 =$
$3 \times 11 =$	$8 \times 5 =$	$16 \times 2 =$
$3 \times 8 =$	$8 \times 6 =$	$16 \times 3 =$

FRANK. My birthday is next Saturday and Mother says that I may have a party and may invite 16 children.

KATE. Let us plan what we shall have to eat.

FRANK. I want ice cream.

KATE. Yes. We shall need a gallon. That is —— quarts. Mother will make it for us, so we shall not have to buy it.

FRANK. Let us buy some little cakes.

KATE. They are 20 cents a dozen. We shall need $1\frac{1}{2}$ dozen. That will cost —— cents.

FRANK. Everybody likes oranges. Let us have some.

KATE. Oranges are 30 cents a dozen. $1\frac{1}{2}$ dozen will cost —— cents.

FRANK. I want some nuts, too.

KATE. We can get some for 20 cents a pound. Two pounds will cost —— cents.

FRANK. We must not forget the candy.

KATE. I like good stick candy. That is 25 cents a pound. Two pounds will cost —— cents.

1 pound of candy cost 30 cents.

$\frac{1}{2}$ pound cost —— cents.

$1\frac{1}{2}$ pounds cost —— cents.

1 dozen bananas cost 20 cents.

$\frac{1}{2}$ dozen bananas cost —— cents.

$1\frac{1}{2}$ dozen bananas cost —— cents.

1 pound of butter cost 40 cents.

$\frac{1}{2}$ pound cost —— cents.

$\frac{1}{2}$ pound cost —— cents.

1 pie cost 20 cents.

$\frac{1}{2}$ pie cost —— cents.

$\frac{1}{4}$ pie cost —— cents.

KATE. Frank, can you add 23 and 22?

FRANK. I don't think I can. That is not very easy.

KATE. I will show you how. Write it on the board, so:

23
22

3 and 2 are ——. See where I write it? The numbers in the next column are tens. 2 tens and 2 tens are —— tens. I will put the 4 in the tens column. The answer is ——.

FRANK. I think I can add now.

KATE. Add 32 and 20.

FRANK. I will write it on the board. 2 and 0 are ——. 3 tens and 2 tens are —— tens. The answer is ——.

Add:

31	24	15	16	14
21	12	32	23	15
34	28	16	31	25
11	21	32	15	21
12	23	13	24	17
25	13	21	14	22
12	13	14	21	25
12	13	12	12	12
12	13	13	15	12

Write number stories about:

24 miles + 15 miles

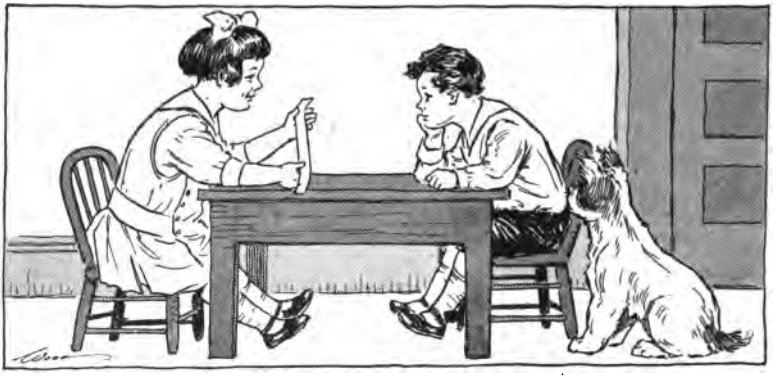
16 bushels + 22 bushels

15 feet and 23 feet

32 dollars and 10 dollars

20 inches and 30 inches

14 gallons and 21 gallons



KATE. I have a strip of paper here that is just one foot long.

FRANK. Then it is —— inches long.

KATE. If I fold it into two equal parts, each part will be —— inches long. One half of a foot is —— inches.

FRANK. Fold it into three equal parts.

KATE. Then each part will be —— inches long.

FRANK. One third of a foot is —— inches. Two thirds of a foot are —— inches.

KATE. Now I am going to fold it into four parts. Each part is now —— inches long.

FRANK. One fourth of a foot is —— inches. Two fourths are —— inches, and three fourths are —— inches.

KATE. Two fourths of a foot is just the same as —— of a foot.

6 in. + 6 in. = ? in.

2 × 6 in. = ? in.

$\frac{1}{2}$ ft. = ? in.

4 in. + 4 in. + 4 in. = ? in.

3 × 4 in. = ? in.

$\frac{1}{3}$ ft. = ? in.

$\frac{2}{3}$ ft. = ? in.

3 in. + 3 in. + 3 in. + 3 in. = ? in.

4 × 3 in. = ? in.

$\frac{1}{4}$ ft. = ? in.

$\frac{3}{4}$ ft. = ? in.

2 in. + 2 in. + 2 in. + 2 in. + 2 in. + 2 in. = ? in.

6 × 2 in. = ? in.

$\frac{1}{6}$ ft. = ? in.

$\frac{5}{6}$ ft. = ? in.

$\frac{1}{12}$ ft. = ? in.

$\frac{5}{12}$ ft. = ? in.

$\frac{11}{12}$ ft. = ? in.

MOTHER. Frank is growing so fast that he will soon be as tall as you, Kate.

KATE. Let us measure and see how tall we are.

MOTHER. Stand here against the wall. I will place a mark over your head.

KATE. Now I can measure to the mark. I am 4 feet and 3 inches tall. I am —— inches tall.

FRANK. Now it is my turn, Mother.

MOTHER. I will put a mark over your head.

FRANK. Let me take the measure. I am 3 feet and 11 inches tall. I am —— inches tall.

KATE. I am —— inches taller than you are.

FRANK. Brother is 5 feet tall. He is —— inches taller than I am.

KATE. Father is 6 feet and 1 inch tall. He is —— foot and —— inch taller than Brother.

$1\frac{1}{2}$ ft. + 2 in. = ? in.
$1\frac{1}{8}$ ft. + 3 in. = ? in.
$1\frac{1}{4}$ ft. + 6 in. = ? in.
$1\frac{1}{6}$ ft. + 4 in. = ? in.
$1\frac{1}{12}$ ft. + 10 in. = ? in.
$2\frac{1}{2}$ ft. − 4 in. = ? in.
3 ft. − 5 in. = ? in.
3 ft. − 10 in. = ? in.
$4\frac{1}{6}$ ft. − 2 in. = ? in.
$4\frac{1}{8}$ ft. − 6 in. = ? in.

51 − 11 =	52 − 12 =	25 + 25 =
51 − 10 =	52 − 10 =	20 + 20 =
51 − 5 =	52 − 11 =	30 + 10 =
51 − 15 =	52 − 4 =	40 + 10 =
51 − 6 =	52 − 14 =	30 + 15 =
51 − 16 =	52 − 6 =	24 + 12 =
51 − 8 =	52 − 16 =	15 + 10 =
51 − 18 =	52 − 3 =	15 + 20 =
51 − 4 =	52 − 13 =	15 + 15 =
51 − 14 =	52 − 7 =	30 + 20 =
51 − 21 =	52 − 20 =	32 + 10 =
51 − 20 =	52 − 8 =	30 + 24 =

Here are some number stories:

Kate used an ounce of coffee to make 2 cups of coffee. How many cups could she make from a pound of coffee?

Frank wished to make a frame for a picture that was 2 feet long and $1\frac{1}{2}$ feet wide. How many feet was it around the picture? If he allowed one foot extra for the corners, what did the molding cost him at 6 cents a foot?

Frank and his cousin picked the cherries on one of Uncle Will's trees in 27 minutes. How long would it have taken 1 boy to do it alone?

Kate has in her bank 1 quarter, 2 dimes, a nickel, and 3 cents. How much money has she?

One of Uncle Will's cows eats 2 quarts of meal a day. How long will it take her to eat 3 pecks?

If corn grows 2 inches in a day, how many inches will it grow in 1 week? How many inches will it grow in 3 weeks?

Frank had 50 cents. He spent $\frac{2}{5}$ of it for a new book. How much did the book cost? How much money did Frank have left?

Uncle Will put 12 gallons of cider in a barrel. He took out $3\frac{1}{2}$ gallons. How many gallons remained?

He sold 1 gallon of cider for 10 cents a quart. How much money did he receive?

Frank's father divided 50 cents equally between the two children. How much did each receive?

Uncle Will's wife bought 5 yards of gingham at 10 cents a yard. She paid for it with eggs at 20 cents a dozen. How many dozen eggs did she give?

There were $8\frac{1}{2}$ bushels of potatoes in a bin. Frank took out 3 pecks. How many pecks remained?

50 pt. = ? qt.	42 da. = ? wk.
52 pt. = ? qt.	49 da. = ? wk.
54 pt. = ? qt.	54 da. = ? wk.
45 ft. = ? yd.	40 qt. = ? pk.
51 ft. = ? yd.	48 qt. = ? pk.
54 ft. = ? yd.	54 qt. = ? pk.
52 qt. = ? gal.	45 sq. ft. = ? sq. yd.
54 qt. = ? gal.	54 sq. ft. = ? sq. yd.
50 c. = ? nickels.	50 c. = ? dimes.
54 c. = ? nickels.	54 c. = ? dimes.

53 − 5 =	54 − 8 =	20 + ? = 40
53 − 3 =	54 − 6 =	30 + ? = 50
53 − 2 =	54 − 4 =	25 + ? = 50
53 − 4 =	54 − 3 =	15 + ? = 30
53 − 6 =	54 − 5 =	40 + ? = 50
53 − 8 =	54 − 7 =	30 + ? = 45
53 − 10 =	54 − 9 =	20 + ? = 50
53 − 12 =	54 − 12 =	10 + ? = 50

Add:

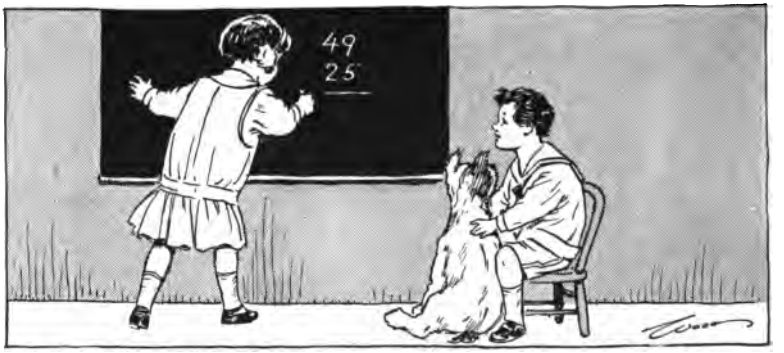
4	6	8	9	7	5	6
8	2	9	6	5	4	3
6	5	1	4	2	3	5
5	7	8	9	2	2	8
5	3	2	1	6	8	4
9	8	6	9	3	4	2
1	8	4	2	5	7	2
8	4	6	2	9	6	3

5	9	7	6	5	7	2
5	9	7	6	5	4	9
4	9	7	6	5	2	8
6	3	7	6	6	3	9
5	3	3	5	6	5	9
7	3	5	4	6	8	8
8	5	8	5	4	2	4
8	2	2	4	4	4	2
6	4	3	6	8	3	5

Make number stories about:

50 feet – 25 feet 20 square feet + 30 square feet

50 cents – 20 cents 6 weeks + 2 days



KATE. I learned something new at school today.

FRANK. What was it?

KATE. I learned how to subtract big numbers.

FRANK. Is it very hard?

KATE. No. Let me show you how. I am going to subtract 25 from 49. See how I write them?

$$\begin{array}{r} 49 \\ 25 \\ \hline 24 \end{array}$$

5 from 9 leaves 4. 2 tens from 4 tens leaves 2 tens. The answer is ——.

FRANK. I do not think that is any harder than adding. Give me some numbers to subtract.

Subtract:

49	47	48	46	45	49
37	21	37	21	35	28
44	39	38	34	36	37
24	15	16	12	21	27
29	37	42	45	55	48
17	22	12	24	30	24
56	56	56	56	56	56
24	35	44	23	42	32

9 + 8 + 5 − 4 =	6 + 3 + 8 − 2 =
6 + 7 − 3 + 2 =	7 + 9 + 9 − 6 =
8 + 8 − 4 + 10 =	8 + 4 + 3 + 6 =
6 + 9 + 9 − 8 =	12 − 5 + 7 + 4 =
8 + 9 + 7 − 6 =	9 + 4 − 6 − 2 =
7 + 6 − 5 + 9 =	15 − 6 + 8 + 9 =
7 + 9 − 4 + 8 =	17 − 9 + 7 + 6 =
12 + 12 − 5 + 4 =	19 − 8 + 5 + 7 =

Here are some number stories about Uncle Will's farm:

Uncle Will has a fine orchard. There are 20 peach trees, 12 pear trees, and 26 apple trees. How many trees are in the orchard?

He has 55 sheep. 42 of them are white. How many black sheep has he?

Kate and Frank set 3 hens. One hen hatched 12 chicks, one hatched 11, and one hatched 15. How many little chickens were hatched?

Uncle Will raised 48 bushels of corn on one acre of ground. He put it into 2 bins. If he put 22 bushels into one bin, how much did he put into the other?

Frank and Kate counted the little pigs. There were 14 in one pen, 20 in another, and 15 in another. How many little pigs were there?

Uncle Will picked 48 bushels of apples. He sold 32 bushels. How many bushels did he keep?

Uncle Will sent Kate's mother 3 turkeys. One weighed 12 pounds, one 14 pounds, and one 11 pounds. How much did they all weigh?

Add 25 to each of these numbers:

24	14	33	22	32	21

Add 14 to each of these numbers:

42	33	34	24	23	35

Add 22 to each of these numbers:

36	34	35	31	25	32

Subtract 20 from each of these numbers:

58	56	52	54	49	47

Subtract 24 from each of these numbers:

58	48	38	57	47	55

$10\frac{1}{2}$	qt.	+	$10\frac{1}{2}$	qt.	= ?	pt.
15	qt.	+	$5\frac{1}{2}$	qt.	= ?	pt.
20	qt.	+	$2\frac{1}{2}$	qt.	= ?	pt.
25	qt.	−	$3\frac{1}{2}$	qt.	= ?	pt.
30	qt.	−	$4\frac{1}{2}$	qt.	= ?	pt.
10	yd.	+	$3\frac{1}{3}$	yd.	= ?	ft.
12	yd.	+	$2\frac{1}{3}$	yd.	= ?	ft.
15	yd.	−	$1\frac{1}{3}$	yd.	= ?	ft.
20	yd.	−	$4\frac{1}{3}$	yd.	= ?	ft.
5	gal.	+	$2\frac{1}{2}$	gal.	= ?	qt.
10	gal.	+	$3\frac{1}{4}$	gal.	= ?	qt.
12	gal.	−	$1\frac{1}{4}$	gal.	= ?	qt.
5	nickels	+	$2\frac{1}{5}$	nickels	= ?	c.
10	nickels	−	12	cents	= ?	c.
4	weeks	+	8	days	= ?	da.
7	weeks	−	12	days	= ?	da.
4	gal.	+	$1\frac{1}{8}$	gal.	= ?	pt.
5	gal.	−	$1\frac{1}{2}$	gal.	= ?	pt.
$2\frac{1}{2}$	dimes	+	$2\frac{1}{2}$	dimes	= ?	c.
6	dimes	−	$3\frac{1}{2}$	dimes	= ?	c.
3	ft.	+	$\frac{1}{8}$	ft.	= ?	in.
2	ft.	+	$\frac{1}{2}$	ft.	= ?	in.

$\frac{1}{2}$ of 40 =	$\frac{1}{4}$ of 40 =	57 – 10 – 4 =
$\frac{1}{2}$ of 50 =	$\frac{1}{4}$ of 36 =	57 – 6 – 3 =
$\frac{1}{2}$ of 52 =	$\frac{1}{4}$ of 32 =	57 – 5 – 4 =
$\frac{1}{2}$ of 48 =	$\frac{1}{4}$ of 44 =	57 – 7 – 10 =
$\frac{1}{2}$ of 44 =	$\frac{1}{4}$ of 48 =	57 – 7 – 7 =
$\frac{1}{2}$ of 42 =	$\frac{1}{4}$ of 56 =	58 – 6 – 10 =
$\frac{1}{2}$ of 60 =	$\frac{1}{4}$ of 52 =	58 – 8 – 9 =
$\frac{1}{2}$ of 38 =	$\frac{1}{4}$ of 28 =	58 – 8 – 10 =
$\frac{1}{2}$ of 36 =	$\frac{1}{4}$ of 24 =	58 – 9 – 9 =
$\frac{1}{2}$ of 46 =	$\frac{1}{4}$ of 60 =	58 – 10 – 10 =
$\frac{1}{6}$ of 30 =	$\frac{1}{5}$ of 15 =	59 – 9 – 10 =
$\frac{1}{6}$ of 36 =	$\frac{1}{5}$ of 40 =	59 – 10 – 10 =
$\frac{1}{6}$ of 42 =	$\frac{1}{5}$ of 30 =	59 – 8 – 5 =
$\frac{1}{6}$ of 48 =	$\frac{1}{5}$ of 40 =	59 – 5 – 8 =
$\frac{1}{6}$ of 51 =	$\frac{1}{5}$ of 50 =	59 – 6 – 6 =
$\frac{1}{6}$ of 54 =	$\frac{1}{5}$ of 55 =	60 – 10 – 20 =
$\frac{1}{6}$ of 60 =	$\frac{1}{5}$ of 45 =	60 – 10 – 6 =
$\frac{1}{6}$ of 33 =	$\frac{1}{5}$ of 35 =	60 – 8 – 8 =
$\frac{1}{6}$ of 45 =	$\frac{1}{5}$ of 25 =	60 – 9 – 5 =
$\frac{1}{6}$ of 39 =	$\frac{1}{5}$ of 60 =	60 – 20 – 20 =
$\frac{1}{6}$ of 27 =	$\frac{1}{5}$ of 20 =	60 – 40 – 10 =

Add:

25	24	34	26	32
34	24	22	33	17
23	21	32	22	24
23	12	14	22	25
12	25	12	12	10
13	24	13	23	21
14	22	22	22	22
22	13	13	13	23

Subtract:

59	48	48	47	56
14	24	16	25	34
58	55	57	45	46
25	25	36	25	36
47	44	49	39	38
26	32	21	17	21

25 qt.	= ? pt.	12 nickels	= ? c.
26 qt.	= ? pt.	60 c.	= ? nickels.
27 qt.	= ? pt.	5 wk.	= ? da.
28 qt.	= ? pt.	6 wk.	= ? da.
29 qt.	= ? pt.	7 wk.	= ? da.
30 qt.	= ? pt.	8 wk.	= ? da.
60 pt.	= ? qt.	60 da.	= ? wk.

15 yd.	= ? ft.	5 gal.	= ? pt.
16 yd.	= ? ft.	6 gal.	= ? pt.
17 yd.	= ? ft.	7 gal.	= ? pt.
18 yd.	= ? ft.	60 pt.	= ? gal.
19 yd.	= ? ft.	5 sq. yd.	= ? sq. ft.
20 yd.	= ? ft.	6 sq. yd.	= ? sq. ft.
12 gal.	= ? qt.	60 sq. ft.	= ? sq. yd.

13 gal.	= ? qt.	5 dimes	= ? c.
14 gal.	= ? qt.	6 dimes	= ? c.
15 gal.	= ? qt.	60 c.	= ? dimes.
60 qt.	= ? gal.	4 ft.	= ? in.
9 nickels	= ? c.	3 ft.	= ? in.
10 nickels	= ? c.	5 ft.	= ? in.
11 nickels	= ? c.	60 in.	= ? ft.

KATE. O Frank, see my pretty little clock! It strikes every hour.

FRANK. Do you know how many minutes in an hour?

KATE. Of course! I knew that a year ago. There are 60 minutes in an hour. I can dress in $\frac{1}{2}$ hour. That is —— minutes.

FRANK. I played ball last evening for $\frac{1}{4}$ of an hour. That was —— minutes.

KATE. I practised my music lesson for $\frac{3}{4}$ of an hour. That was —— minutes.

FRANK. It will take the minute hand of the clock 20 minutes to go from the figure 12 to the figure 4.

KATE. It will take it —— minutes to go from the figure 4 to the figure 8.

FRANK. It will take it 20 minutes to go from the figure 8 to the figure ——. $\frac{1}{3}$ of an hour is —— minutes.

KATE. There are 12 five-minute spaces on the face of the clock. —— minutes are $\frac{1}{12}$ of an hour.

FRANK. $\frac{5}{12}$ of an hour will be —— minutes, and $\frac{7}{12}$ of an hour will be —— minutes. $\frac{6}{12}$ of an hour is the same as —— of an hour.

1 hr. = ? min.	30 min. = ? hr.
$\frac{1}{2}$ hr. = ? min.	15 min. = ? hr.
$\frac{1}{4}$ hr. = ? min.	45 min. = ? hr.
$\frac{3}{4}$ hr. = ? min.	10 min. = ? hr.
$\frac{1}{6}$ hr. = ? min.	5 min. = ? hr.
$\frac{1}{12}$ hr. = ? min.	35 min. = ? hr.

Write number stories about:

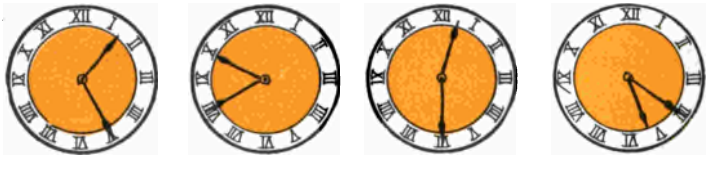
$\frac{1}{2}$ hour + $\frac{1}{4}$ hour	$\frac{1}{2}$ hour − 10 minutes
$\frac{3}{4}$ hour + 10 minutes	1 hour − 20 minutes
1 hour − $\frac{3}{4}$ hour	$\frac{3}{4}$ hour − $\frac{1}{2}$ hour

Frank and Kate made a clock out of stiff paper. They put on the hands with pins. Then they played "What time is it?"

Where did Frank put the minute hand to show 15 minutes after 9? 10 minutes after 9? Half past nine? A quarter to ten?

Where did Kate put the hands to show that it was 3 o'clock? 5 minutes after 3? 20 minutes after 3? 25 minutes to 4? 5 minutes to 4?

Can you tell the time on each of these clocks?



Make a clock face and show the time for each of these number stories:

Frank got up at 10 minutes after 7. He was ready for breakfast in 20 minutes. What time was it?

He finished breakfast at 8 o'clock and worked in his garden 25 minutes. What time was it?

He started for school at half past 8. It took him 15 minutes to walk to school. What time did he reach there?

School began at 9 o'clock. The children sang for 20 minutes. What time was it then?

Then Frank studied his reading lesson for 15 minutes. Show what time it was when he finished.

The children went out for recess at half past 10. They played for 15 minutes. What time was it?

At 11 o'clock Frank began writing some number stories. He worked for 15 minutes. Show what time it was.

Show what time the children went home for lunch. They came back one hour later. What time was it?

$\frac{1}{2}$ hr. + 10 min. = ? min.
$\frac{1}{2}$ hr. + 15 min. = ? min.
$\frac{1}{2}$ hr. + $\frac{1}{4}$ hr. = ? min.
$\frac{1}{4}$ hr. + $\frac{1}{4}$ hr. = ? min.
$\frac{1}{4}$ hr. + $\frac{1}{1\frac{1}{2}}$ hr. = ? min.
$\frac{1}{2}$ hr. − $\frac{1}{4}$ hr. = ? min.
$\frac{3}{4}$ hr. − 10 min. = ? min.
$\frac{1}{2}$ hr. − 20 min. = ? min.
$\frac{1}{4}$ hr. − $\frac{1}{1\frac{1}{2}}$ hr. = ? min.
1 hr. − $\frac{3}{4}$ hr. = ? min.

2 quarters + 8 cents = ? cents.
1 quarter + 4 nickels = ? cents.
1 quarter + 3 dimes = ? cents.
2 quarters + 1 nickel = ? cents.

3 dimes + ? nickels = 50 cents.
1 quarter + ? nickels = 50 cents.
4 dimes + ? cents = 60 cents.
3 dimes + ? nickels = 60 cents.
1 half-dollar + ? nickels = 60 cents.
2 quarters + ? cents = 60 cents.
1 quarter + ? nickels = 60 cents.
2 quarters + ? nickels = 60 cents.

The multiplication table of fives:

$5 \times 1 = 5$	$5 \times 7 = 35$
$5 \times 2 = 10$	$5 \times 8 = 40$
$5 \times 3 = 15$	$5 \times 9 = 45$
$5 \times 4 = 20$	$5 \times 10 = 50$
$5 \times 5 = 25$	$5 \times 11 = 55$
$5 \times 6 = 30$	$5 \times 12 = 60$

Write the multiplication tables of twos, threes, and fours.

$60 \div 2 =$	$50 \div 2 =$	$2 \times 2 \times 2 =$
$60 \div 3 =$	$50 \div 5 =$	$2 \times 3 \times 3 =$
$60 \div 4 =$	$50 \div 10 =$	$3 \times 3 \times 3 =$
$60 \div 5 =$	$49 \div 7 =$	$3 \times 4 \times 3 =$
$60 \div 6 =$	$48 \div 6 =$	$3 \times 3 \times 5 =$
$60 \div 10 =$	$48 \div 8 =$	$2 \times 4 \times 4 =$
$60 \div 12 =$	$48 \div 4 =$	$4 \times 2 \times 5 =$
$56 \div 8 =$	$48 \div 12 =$	$2 \times 5 \times 5 =$
$56 \div 7 =$	$45 \div 5 =$	$5 \times 2 \times 6 =$
$54 \div 6 =$	$45 \div 9 =$	$6 \times 2 \times 5 =$
$54 \div 9 =$	$44 \div 11 =$	$3 \times 4 \times 2 =$
$50 \div 10 =$	$40 \div 4 =$	$3 \times 5 \times 2 =$

4 tens and 2 units are —— .
3 tens and —— units are 35.
5 tens and 5 units are —— .
4 tens and 8 units are —— .
5 tens and 4 units are —— .
6 tens are —— .

Count by 3's from 2 to 59.
Count by 4's from 3 to 59.
Count by 5's from 4 to 59.

Count backward by 2's from 59.
Count backward by 3's from 59.
Count backward by 4's from 59.
Count backward by 5's from 59.
Count backward by 6's from 59.
Count backward by 10's from 59.

$60 = 2 \times ?$	$60 = 15 \times ?$
$60 = 30 \times ?$	$60 = 5 \times ?$
$60 = 3 \times ?$	$60 = 12 \times ?$
$60 = 20 \times ?$	$60 = 6 \times ?$
$60 = 4 \times ?$	$60 = 10 \times ?$

Add:

2	1	3	5	6	7	4
3	2	8	4	3	4	9
5	8	7	5	4	6	5
8	5	9	8	1	1	8
4	4	9	9	6	3	2

Write the answers of these examples.

How many units are there in each answer?

How many tens are there in each answer?

Add:

35	25	15	45	35	15
35	25	45	25	15	25
22	43	52	24	23	37
28	17	28	46	27	33
42	26	33	48	28	36
29	35	38	13	44	26
15	16	17	18	19	15
15	16	17	18	19	25
15	16	17	18	19	25

The multiplication table of sevens:

$7 \times 1 = 7$	$7 \times 7 = 49$
$7 \times 2 = 14$	$7 \times 8 = 56$
$7 \times 3 = 21$	$7 \times 9 = 63$
$7 \times 4 = 28$	$7 \times 10 = 70$
$7 \times 5 = 35$	$7 \times 11 = 77$
$7 \times 6 = 42$	$7 \times 12 = 84$

Write the multiplication tables of fours, fives, and sixes.

$14 \div 7 =$	$5 \times ? = 35$	$6 \times ? = 54$
$77 \div 7 =$	$7 \times ? = 35$	$5 \times ? = 55$
$28 \div 7 =$	$6 \times ? = 36$	$7 \times ? = 56$
$42 \div 7 =$	$5 \times ? = 40$	$5 \times ? = 60$
$63 \div 7 =$	$7 \times ? = 42$	$6 \times ? = 60$
$84 \div 7 =$	$6 \times ? = 42$	$7 \times ? = 63$
$70 \div 7 =$	$4 \times ? = 44$	$6 \times ? = 66$
$56 \div 7 =$	$5 \times ? = 45$	$7 \times ? = 70$
$49 \div 7 =$	$6 \times ? = 48$	$6 \times ? = 72$
$35 \div 7 =$	$4 \times ? = 48$	$7 \times ? = 77$
$21 \div 7 =$	$5 \times ? = 50$	$7 \times ? = 84$

The multiplication table of eights:

$8 \times 1 = 8$	$8 \times 7 = 56$
$8 \times 2 = 16$	$8 \times 8 = 64$
$8 \times 3 = 24$	$8 \times 9 = 72$
$8 \times 4 = 32$	$8 \times 10 = 80$
$8 \times 5 = 40$	$8 \times 11 = 88$
$8 \times 6 = 48$	$8 \times 12 = 96$

Write the multiplication tables of fives, sixes, and sevens.

$16 \div 8 =$	$\frac{1}{8}$ of $24 =$	$76 - 8 =$
$32 \div 8 =$	$\frac{1}{8}$ of $64 =$	$96 - 8 =$
$48 \div 8 =$	$\frac{1}{8}$ of $72 =$	$86 - 8 =$
$96 \div 8 =$	$\frac{1}{8}$ of $80 =$	$66 - 8 =$
$88 \div 8 =$	$\frac{1}{8}$ of $96 =$	$56 - 7 =$
$24 \div 8 =$	$\frac{1}{8}$ of $88 =$	$96 - 7 =$
$40 \div 8 =$	$\frac{1}{8}$ of $56 =$	$66 - 10 =$
$56 \div 8 =$	$\frac{1}{8}$ of $16 =$	$96 - 10 =$
$72 \div 8 =$	$\frac{1}{8}$ of $32 =$	$56 - 6 =$
$64 \div 8 =$	$\frac{1}{8}$ of $40 =$	$96 - 6 =$
$80 \div 8 =$	$\frac{1}{8}$ of $48 =$	$96 - 12 =$

Count by 4's to 100.
Count by 5's to 100.
Count by 10's to 100.

Count by 3's from 1 to 100.
Count by 6's from 4 to 100.
Count by 7's from 2 to 100.

Count backward by 10's from 100.
Count backward by 2's from 99.
Count backward by 3's from 99.

Add:

47	54	62	45	36	28
23	48	29	26	47	34
33	24	37	48	24	32
34	35	21	22	24	32
33	41	22	16	26	36
25	32	33	15	15	22
25	24	12	25	26	22
25	22	24	15	36	22
25	12	22	25	16	22

The multiplication table of nines:

$9 \times 1 = 9$	$9 \times 7 = 63$
$9 \times 2 = 18$	$9 \times 8 = 72$
$9 \times 3 = 27$	$9 \times 9 = 81$
$9 \times 4 = 36$	$9 \times 10 = 90$
$9 \times 5 = 45$	$9 \times 11 = 99$
$9 \times 6 = 54$	$9 \times 12 = 108$

Write the multiplication tables of sixes, sevens, and eights.

$18 \div 9 =$	$6 \times ? = 54$	$92 + ? = 100$
$72 \div 9 =$	$7 \times ? = 56$	$88 + ? = 100$
$27 \div 9 =$	$6 \times ? = 60$	$91 + ? = 100$
$81 \div 9 =$	$5 \times ? = 60$	$98 + ? = 100$
$36 \div 9 =$	$7 \times ? = 63$	$87 + ? = 100$
$90 \div 9 =$	$9 \times ? = 63$	$93 + ? = 100$
$108 \div 9 =$	$8 \times ? = 64$	$75 + ? = 100$
$99 \div 9 =$	$6 \times ? = 66$	$90 + ? = 100$
$63 \div 9 =$	$7 \times ? = 70$	$94 + ? = 100$
$54 \div 9 =$	$8 \times ? = 72$	$96 + ? = 100$
$45 \div 9 =$	$10 \times ? = 80$	$95 + ? = 100$

Tables of tens, elevens, and twelves:

$10 \times 1 = 10$	$11 \times 1 = 11$	$12 \times 1 = 12$
$10 \times 2 = 20$	$11 \times 2 = 22$	$12 \times 2 = 24$
$10 \times 3 = 30$	$11 \times 3 = 33$	$12 \times 3 = 36$
$10 \times 4 = 40$	$11 \times 4 = 44$	$12 \times 4 = 48$
$10 \times 5 = 50$	$11 \times 5 = 55$	$12 \times 5 = 60$
$10 \times 6 = 60$	$11 \times 6 = 66$	$12 \times 6 = 72$
$10 \times 7 = 70$	$11 \times 7 = 77$	$12 \times 7 = 84$
$10 \times 8 = 80$	$11 \times 8 = 88$	$12 \times 8 = 96$
$10 \times 9 = 90$	$11 \times 9 = 99$	$12 \times 9 = 108$
$10 \times 10 = 100$	$11 \times 10 = 110$	$12 \times 10 = 120$
$10 \times 11 = 110$	$11 \times 11 = 121$	$12 \times 11 = 132$
$10 \times 12 = 120$	$11 \times 12 = 132$	$12 \times 12 = 144$

$120 \div 10 =$	$121 \div ? = 11$	$60 \div 12 =$
$90 \div 10 =$	$55 \div ? = 11$	$96 \div 12 =$
$50 \div 10 =$	$99 \div ? = 11$	$36 \div 12 =$
$100 \div 10 =$	$77 \div ? = 11$	$72 \div 12 =$
$60 \div 10 =$	$88 \div ? = 11$	$84 \div 12 =$
$80 \div 10 =$	$66 \div ? = 11$	$108 \div 12 =$
$110 \div 10 =$	$44 \div ? = 11$	$48 \div 12 =$
$40 \div 10 =$	$110 \div ? = 11$	$132 \div 12 =$
$70 \div 10 =$	$132 \div ? = 11$	$144 \div 12 =$

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